50%] Building CXX object
tests/2d_examples/test_2d_aortic_valve/CMakeFiles/test_2d_aortic_valve.dir/aortic_valve.cpp.o
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: In
constructor 'WaterBlock::WaterBlock(SPH::SPHSystem&, std::string)':
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:149:46:
error: no matching function for call to 'SPH::FluidBody::FluidBody(SPH::SPHSystem&,
std::string&)'
  149 | : FluidBody(system, body_name)
      | ^
In file included from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/unstructured_mesh.h:34,
          from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/all_complex_bodies.h:33,
          from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:35,
          from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
          from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/bodies/fluid_body.h:45:14: note: candidate:
'SPH::FluidBody::FluidBody(SPH::SPHSystem&, SPH::SharedPtr<SPH::Shape>)'
   45 | explicit FluidBody(SPHSystem &system, SharedPtr<Shape> shape_ptr);
      | ^~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/bodies/fluid_body.h:45:60: note: no known conversion for
argument 2 from 'std::string' {aka 'std::__cxx11::basic_string<char>'} to
'SPH::SharedPtr<SPH::Shape>' {aka 'std::shared_ptr<SPH::Shape>'}
   45 | explicit FluidBody(SPHSystem &system, SharedPtr<Shape> shape_ptr);
      | ~~~~~~~~~~~~~~~~~^~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:155:29:
error: request for member 'add' in '((WaterBlock*)this)-
>WaterBlock::<anonymous>.SPH::FluidBody::<anonymous>.SPH::RealBody::<anonymous>.SP
H::SPHBody::body_shape_', which is of pointer type 'SPH::Shape*' (maybe you meant to use '-
>' ?)
  155 | body_shape_.add<MultiPolygonShape>(multi_polygon);
      | ^~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:155:50:
error: expected primary-expression before '>' token
  155 | body_shape_.add<MultiPolygonShape>(multi_polygon);
      | ^
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: In
constructor 'InsertedBody::InsertedBody(SPH::SPHSystem&, std::string)':
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:173:29:
error: request for member 'add' in '((InsertedBody*)this)-
>InsertedBody::<anonymous>.SPH::SolidBody::<anonymous>.SPH::RealBody::<anonymous>.
SPH::SPHBody::body_shape_', which is of pointer type 'SPH::Shape*' (maybe you meant to
use '->' ?)
  173 | body_shape_.add<LevelSetShape>(this, multi_polygon_shape);
      | ^~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:173:46:

error: expected primary-expression before '>' token
```
  173 |            body_shape_.add<LevelSetShape>(this, multi_polygon_shape);
      |                                       ^
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:173:54:
error: left operand of comma operator has no effect [-Werror=unused-value]
```
  173 |            body_shape_.add<LevelSetShape>(this, multi_polygon_shape);
      |                                                 ^~~~~~~~~~~~~~~~~~
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: At global
scope:
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:189:1: error:
expected class-name before '{' token
```
  189 | {
      | ^
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:209:14:
error: 'void ParabolicInflow::setupDynamics(SPH::Real)' marked 'override', but does not
override
```
  209 |      void setupDynamics(Real dt = 0.0) override
      |           ^~~~~~~~~~~~~
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: In
constructor 'ParabolicInflow::ParabolicInflow(SPH::FluidBody&, SPH::BodyPartByCell&)':
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:193:19:
error: class 'ParabolicInflow' does not have any field named 'InflowBoundaryCondition'
```
  193 |            : InflowBoundaryCondition(fluid_body, constrained_region)
      |              ^~~~~~~~~~~~~~~~~~~~~~
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: At global
scope:
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:217:1: error:
expected class-name before '{' token
```
  217 | {
      | ^
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: In
constructor 'LeafletObserverParticleGenerator::LeafletObserverParticleGenerator()':
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:219:46:
error: class 'LeafletObserverParticleGenerator' does not have any field named
'ParticleGeneratorDirect'
```
  219 |      LeafletObserverParticleGenerator() : ParticleGeneratorDirect()
      |                                           ^~~~~~~~~~~~~~~~~~~~~~
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:222:17:
error: 'positions_volumes_' was not declared in this scope
```
  222 |            positions_volumes_.push_back(std::make_pair(0.5 * (BRT + BRB), 0.0));
      |            ^~~~~~~~~~~~~~~~~~
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: At global
scope:
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:227:1: error:
expected class-name before '{' token
```
  227 | {
      | ^
```

```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: In
constructor 'FluidObserverParticleGenerator::FluidObserverParticleGenerator()':
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:229:44:
error: class 'FluidObserverParticleGenerator' does not have any field named
'ParticleGeneratorDirect'
  229 |      FluidObserverParticleGenerator() : ParticleGeneratorDirect()
      |                                         ^~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:239:25:
error: 'positions_volumes_' was not declared in this scope
  239 |              positions_volumes_.push_back(std::make_pair(point_coordinate, 0.0));
      |              ^~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp: In function
'int main(int, char**)':
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:249:16:
error: 'bool SPH::SPHSystem::run_particle_relaxation_' is protected within this context
  249 |      system.run_particle_relaxation_ = false;
      |             ^~~~~~~~~~~~~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
                 from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
                 from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:98:10: note: declared
protected here
   98 |    bool run_particle_relaxation_;  /**< run particle relaxation for body fitted particle
distribution */
      |         ^~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:249:16:
note: field 'bool SPH::SPHSystem::run_particle_relaxation_' can be accessed via 'bool
SPH::SPHSystem::RunParticleRelaxation()'
  249 |      system.run_particle_relaxation_ = false;
      |             ^~~~~~~~~~~~~~~~~~~~~~~
      |             RunParticleRelaxation()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:251:16:
error: 'bool SPH::SPHSystem::reload_particles_' is protected within this context
  251 |      system.reload_particles_ = true;
      |             ^~~~~~~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
                 from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
                 from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:99:10: note: declared
protected here
   99 |    bool reload_particles_;         /**< start the simulation with relaxed particles. */
```

```
        |       ^~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:251:16:
note: field 'bool SPH::SPHSystem::reload_particles_' can be accessed via 'bool
SPH::SPHSystem::ReloadParticles()'
  251 |       system.reload_particles_ = true;
        |              ^~~~~~~~~~~~~~~~
        |              ReloadParticles()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:253:16:
error: 'size_t SPH::SPHSystem::restart_step_' is protected within this context
  253 |       system.restart_step_ = 0;
        |              ^~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
           from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
           from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
           from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
           from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:100:12: note: declared
protected here
  100 |    size_t restart_step_;        /**< restart step */
        |           ^~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:253:16:
note: field 'size_t SPH::SPHSystem::restart_step_' can be accessed via 'size_t
SPH::SPHSystem::RestartStep()'
  253 |       system.restart_step_ = 0;
        |              ^~~~~~~~~~~~
        |              RestartStep()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:259:9: error:
'In_Output' was not declared in this scope
  259 |       In_Output in_output(system);
        |       ^~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:264:9: error:
'FluidParticles' was not declared in this scope
  264 |      FluidParticles fluid_particles(water_block,
makeShared<WeaklyCompressibleFluid>(rho0_f, c_f, mu_f));
        |      ^~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:270:21:
error: 'bool SPH::SPHSystem::run_particle_relaxation_' is protected within this context
  270 |      if (!system.run_particle_relaxation_ && system.reload_particles_)
        |                  ^~~~~~~~~~~~~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
           from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
           from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
           from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
           from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:98:10: note: declared
```

```
protected here
   98 |    bool run_particle_relaxation_;  /**< run particle relaxation for body fitted particle
distribution */
      |         ^~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:270:21:
note: field 'bool SPH::SPHSystem::run_particle_relaxation_' can be accessed via 'bool
SPH::SPHSystem::RunParticleRelaxation()'
  270 |       if (!system.run_particle_relaxation_ && system.reload_particles_)
      |             ^~~~~~~~~~~~~~~~~~~~~~
      |             RunParticleRelaxation()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:270:56:
error: 'bool SPH::SPHSystem::reload_particles_' is protected within this context
  270 |       if (!system.run_particle_relaxation_ && system.reload_particles_)
      |                                                      ^~~~~~~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
           from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
           from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
           from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
           from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:99:10: note: declared
protected here
   99 |    bool reload_particles_;       /**< start the simulation with relaxed particles. */
      |         ^~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:270:56:
note: field 'bool SPH::SPHSystem::reload_particles_' can be accessed via 'bool
SPH::SPHSystem::ReloadParticles()'
  270 |       if (!system.run_particle_relaxation_ && system.reload_particles_)
      |                                                      ^~~~~~~~~~~~~~~~~
      |                                                      ReloadParticles()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:271:88:
error: 'in_output' was not declared in this scope
  271 |          inserted_body_particle_generator =
makeShared<ParticleGeneratorReload>(in_output, inserted_body.getBodyName());
      |                                              ^~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:271:113:
error: 'class InsertedBody' has no member named 'getBodyName'; did you mean 'getName'?
  271 |          inserted_body_particle_generator =
makeShared<ParticleGeneratorReload>(in_output, inserted_body.getBodyName());
      |                                                                 ^~~~~~~~~~~
      |                                                                 getName
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:273:114:
error: no matching function for call to
'SPH::ElasticSolidParticles::ElasticSolidParticles(InsertedBody&,
SPH::SharedPtr<SPH::LinearElasticSolid>, SPH::SharedPtr<SPH::ParticleGenerator>&)'
  273 |          makeShared<LinearElasticSolid>(rho0_s, Youngs_modulus, poisson),
inserted_body_particle_generator);
```

```
                                                                          ^
In file included from
/home/mirzaei/sphinxsys/src/shared/particle_dynamics/fluid_dynamics/base_fluid_dynamics.h:3
5,
          from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/unstructured_mesh.h:31,
          from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/all_complex_bodies.h:33,
          from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:35,
          from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
          from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/particles/solid_particles.h:78:5: note: candidate:
'SPH::ElasticSolidParticles::ElasticSolidParticles(SPH::SPHBody&, SPH::ElasticSolid*)'
   78 |    ElasticSolidParticles(SPHBody &sph_body, ElasticSolid *elastic_solid);
      |    ^~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/particles/solid_particles.h:78:5: note:   candidate expects 2
arguments, 3 provided
/home/mirzaei/sphinxsys/src/shared/particles/solid_particles.h:75:7: note: candidate:
'SPH::ElasticSolidParticles::ElasticSolidParticles(const SPH::ElasticSolidParticles&)'
   75 | class ElasticSolidParticles : public SolidParticles
      |       ^~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/particles/solid_particles.h:75:7: note:   candidate expects 1
argument, 3 provided
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:277:9: error:
'ProbeBody' was not declared in this scope
  277 |     ProbeBody leaflet_observer(system, "BeamObserver");
      |       ^~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:278:51:
error: 'leaflet_observer' was not declared in this scope
  278 |     ObserverParticles beam_observer_particles(leaflet_observer,
makeShared<LeafletObserverParticleGenerator>());
      |                                               ^~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:279:18:
error: expected ';' before 'fluid_observer'
  279 |     ProbeBody fluid_observer(system, "FluidObserver");
      |             ^~~~~~~~~~~~~~~
      |             ;
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:280:51:
error: 'fluid_observer' was not declared in this scope
  280 |     ObserverParticles flow_observer_particles(fluid_observer,
makeShared<FluidObserverParticleGenerator>());
      |                                             ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:286:9: error:
'BodyRelationInner' was not declared in this scope
  286 |     BodyRelationInner water_block_inner(water_block);
      |       ^~~~~~~~~~~~~~~~~
```

```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:287:26:
error: expected ';' before 'inserted_body_inner'
  287 |         BodyRelationInner inserted_body_inner(inserted_body);
      |                           ^~~~~~~~~~~~~~~~~~~~
      |                           ;
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:288:9: error:
'ComplexBodyRelation' was not declared in this scope
  288 |         ComplexBodyRelation water_block_complex(water_block, { &inserted_body });
      |         ^~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:288:80:
error: expected primary-expression before ')' token
  288 |         ComplexBodyRelation water_block_complex(water_block, { &inserted_body });
      |                                                                                ^
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:289:9: error:
'BodyRelationContact' was not declared in this scope
  289 |         BodyRelationContact inserted_body_contact(inserted_body, { &water_block });
      |         ^~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:289:82:
error: expected primary-expression before ')' token
  289 |         BodyRelationContact inserted_body_contact(inserted_body, { &water_block });
      |                                                                                  ^
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:290:28:
error: expected ';' before 'leaflet_observer_contact'
  290 |         BodyRelationContact leaflet_observer_contact(leaflet_observer, { &inserted_body
});
      |                             ^~~~~~~~~~~~~~~~~~~~~~~~
      |                             ;
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:290:90:
error: expected primary-expression before ')' token
  290 |         BodyRelationContact leaflet_observer_contact(leaflet_observer, { &inserted_body
});
      |                                                                                        ^
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:291:28:
error: expected ';' before 'fluid_observer_contact'
  291 |         BodyRelationContact fluid_observer_contact(fluid_observer, { &water_block });
      |                             ^~~~~~~~~~~~~~~~~~~~~~
      |                             ;
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:291:84:
error: expected primary-expression before ')' token
  291 |         BodyRelationContact fluid_observer_contact(fluid_observer, { &water_block });
      |                                                                                    ^
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:293:20:
error: 'bool SPH::SPHSystem::run_particle_relaxation_' is protected within this context
  293 |         if (system.run_particle_relaxation_)
      |                    ^~~~~~~~~~~~~~~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
```

```
                from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
                from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
                from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:98:10: note: declared
protected here
   98 |    bool run_particle_relaxation_;  /**< run particle relaxation for body fitted particle
distribution */
      |         ^~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:293:20:
note: field 'bool SPH::SPHSystem::run_particle_relaxation_' can be accessed via 'bool
SPH::SPHSystem::RunParticleRelaxation()'
  293 |        if (system.run_particle_relaxation_)
      |                   ^~~~~~~~~~~~~~~~~~~~~~
      |                   RunParticleRelaxation()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:299:17:
error: 'RandomizePartilePosition' was not declared in this scope
  299 |            RandomizePartilePosition  random_inserted_body_particles(inserted_body);
      |            ^~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:301:69:
error: 'in_output' was not declared in this scope
  301 |            BodyStatesRecordingToVtp write_inserted_body_to_vtp(in_output, {
&inserted_body });
      |                                                                ^~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:305:75:
error: 'inserted_body_inner' was not declared in this scope; did you mean 'inserted_body'?
  305 |            relax_dynamics::RelaxationStepInner
relaxation_step_inner(inserted_body_inner);
      |                                                       ^~~~~~~~~~~~~~~~~~~
      |                                                       inserted_body
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:309:17:
error: 'random_inserted_body_particles' was not declared in this scope; did you mean
'inserted_body_particles'?
  309 |            random_inserted_body_particles.parallel_exec(0.25);
      |            ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~
      |            inserted_body_particles
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:310:39:
error: 'SPH::SimpleDynamics<SPH::ShapeSurfaceBounding>
SPH::relax_dynamics::RelaxationStep<SPH::relax_dynamics::RelaxationResidue<SPH::Inner<
> > >::surface_bounding_' is protected within this context
  310 |            relaxation_step_inner.surface_bounding_.parallel_exec();
      |                                  ^~~~~~~~~~~~~~~~~
In file included from
/home/mirzaei/sphinxsys/src/shared/particle_dynamics/relax_dynamics/relax_stepping.hpp:4,
                from
/home/mirzaei/sphinxsys/src/shared/particle_dynamics/relax_dynamics/all_relax_dynamics.h:33
,
```

from
/home/mirzaei/sphinxsys/src/shared/particle_dynamics/all_shared_physical_dynamics.h:43,
from
/home/mirzaei/sphinxsys/src/for_2D_build/particle_dynamics/all_physical_dynamics.h:34,
from /home/mirzaei/sphinxsys/src/shared/io_system/io_base.h:31,
from /home/mirzaei/sphinxsys/src/shared/io_system/io_vtk.h:31,
from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/unstructured_mesh.h:35,
from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/all_complex_bodies.h:33,
from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:35,
from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/particle_dynamics/relax_dynamics/relax_stepping.h:172:42
: note: declared protected here
  172 | SimpleDynamics<ShapeSurfaceBounding> surface_bounding_;
      | ^~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:310:57:
error: 'class SPH::SimpleDynamics<SPH::ShapeSurfaceBounding>' has no member named
'parallel_exec'
  310 | relaxation_step_inner.surface_bounding_.parallel_exec();
      | ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:317:47:
error: 'using RelaxationStepInner = class
SPH::relax_dynamics::RelaxationStep<SPH::relax_dynamics::RelaxationResidue<SPH::Inner<
> > >' {aka 'class
SPH::relax_dynamics::RelaxationStep<SPH::relax_dynamics::RelaxationResidue<SPH::Inner<
> > >'} has no member named 'parallel_exec'
  317 | relaxation_step_inner.parallel_exec();
      | ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:335:25:
error: 'CorrectConfiguration' is not a member of 'SPH::solid_dynamics'
  335 | solid_dynamics::CorrectConfiguration
inserted_body_corrected_configuration(inserted_body_inner);
      | ^~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:342:77:
error: 'water_block_complex' was not declared in this scope
  342 | fluid_dynamics::DensitySummationComplex
update_density_by_summation(water_block_complex);
      | ^~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:349:25:
error: 'PressureRelaxationWithWall' is not a member of 'SPH::fluid_dynamics'
  349 | fluid_dynamics::PressureRelaxationWithWall
pressure_relaxation(water_block_complex);
      | ^~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:350:25:

error: 'DensityRelaxationRiemannWithWall' is not a member of 'SPH::fluid_dynamics'
  350 | fluid_dynamics::DensityRelaxationRiemannWithWall
density_relaxation(water_block_complex);
      | ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:354:65:
error: missing template arguments before 'transport_velocity_correction'
  354
| fluid_dynamics::TransportVelocityCorrectionComplex   transport_velocity_correction(wat
er_block_complex);
      | ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:356:9: error:
'CombinedInteractionDynamics' was not declared in this scope
  356 | CombinedInteractionDynamics
viscous_acceleration_and_transport_correction(viscous_acceleration,
transport_velocity_correction);
      | ^~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:358:59:
error: 'water_block_inner' was not declared in this scope; did you mean 'water_block'?
  358 | fluid_dynamics::VorticityInner compute_vorticity(water_block_inner);
      | ^~~~~~~~~~~~~~~~~~
      | water_block
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:361:82:
error: no matching function for call to
'SPH::BodyRegionByCell::BodyRegionByCell(WaterBlock&, const char [7],
SPH::MultiPolygonShape&)'
  361 | BodyRegionByCell inflow_buffer(water_block, "Buffer", inflow_buffer_shape);
      | ^
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
            from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
            from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:180:5: note: candidate:
'SPH::BodyRegionByCell::BodyRegionByCell(SPH::RealBody&,
SPH::SharedPtr<SPH::Shape>)'
  180 | BodyRegionByCell(RealBody &real_body, SharedPtr<Shape> shape_ptr);
      | ^~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:180:5: note: candidate expects
2 arguments, 3 provided
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:172:7: note: candidate:
'SPH::BodyRegionByCell::BodyRegionByCell(const SPH::BodyRegionByCell&)'
  172 | class BodyRegionByCell : public BodyPartByCell
      | ^~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:172:7: note: candidate expects
1 argument, 3 provided
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:364:9: error:
'PeriodicConditionInAxisDirectionUsingCellLinkedList' was not declared in this scope
  364 | PeriodicConditionInAxisDirectionUsingCellLinkedList

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      periodic_condition(water_block, xAxis);
     |        ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:369:25:
error: 'FluidForceOnSolidUpdate' is not a member of 'SPH::solid_dynamics'
 369 |        solid_dynamics::FluidForceOnSolidUpdate
fluid_force_on_inserted_body(inserted_body_contact);
     |                     ^~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:378:25:
error: 'StressRelaxationFirstHalf' is not a member of 'SPH::solid_dynamics'
 378 |        solid_dynamics::StressRelaxationFirstHalf
inserted_body_stress_relaxation_first_half(inserted_body_inner);
     |                     ^~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:379:25:
error: 'StressRelaxationSecondHalf' is not a member of 'SPH::solid_dynamics'
 379 |        solid_dynamics::StressRelaxationSecondHalf
inserted_body_stress_relaxation_second_half(inserted_body_inner);
     |                     ^~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:382:88:
error: no matching function for call to
'SPH::BodyRegionByParticle::BodyRegionByParticle(InsertedBody&, const char [9],
SPH::MultiPolygonShape&)'
 382 |        BodyRegionByParticle leaflet_base(inserted_body, "BeamBase",
leaflet_base_shape);
     |                                                            ^
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
          from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
          from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:131:5: note: candidate:
'SPH::BodyRegionByParticle::BodyRegionByParticle(SPH::SPHBody&,
SPH::SharedPtr<SPH::Shape>)'
 131 |    BodyRegionByParticle(SPHBody &sph_body, SharedPtr<Shape> shape_ptr);
     |    ^~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:131:5: note:   candidate expects
2 arguments, 3 provided
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:123:7: note: candidate:
'SPH::BodyRegionByParticle::BodyRegionByParticle(const SPH::BodyRegionByParticle&)'
 123 | class BodyRegionByParticle : public BodyPartByParticle
     |       ^~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:123:7: note:   candidate expects
1 argument, 3 provided
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:383:25:
error: 'ConstrainSolidBodyRegion' is not a member of 'SPH::solid_dynamics'; did you mean
'ConstrainSolidBodyMassCenter'?
 383 |        solid_dynamics::ConstrainSolidBodyRegion constrain_leaflet_base(inserted_body,
leaflet_base);
     |                     ^~~~~~~~~~~~~~~~~~~~~~~~
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    |                    ConstrainSolidBodyMassCenter
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:389:57:
error: 'in_output' was not declared in this scope
 389 |        BodyStatesRecordingToVtp write_real_body_states(in_output,
system.real_bodies_);
    |                               ^~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:391:9: error:
'BodyReducedQuantityRecording' was not declared in this scope
 391 |        BodyReducedQuantityRecording<solid_dynamics::TotalViscousForceOnSolid>
    |        ^~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:391:54:
error: 'TotalViscousForceOnSolid' is not a member of 'SPH::solid_dynamics'
 391 |        BodyReducedQuantityRecording<solid_dynamics::TotalViscousForceOnSolid>
    |                               ^~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:392:17:
error: 'write_total_viscous_force_on_inserted_body' was not declared in this scope
 392 |            write_total_viscous_force_on_inserted_body(in_output, inserted_body);
    |            ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:393:95:
error: 'leaflet_observer_contact' was not declared in this scope
 393 |        ObservedQuantityRecording<Vecd> write_leaflet_tip_displacement("Position",
in_output, leaflet_observer_contact);
    |                                            ^~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:394:85:
error: 'fluid_observer_contact' was not declared in this scope
 394 |        ObservedQuantityRecording<Vecd> write_fluid_velocity("Velocity", in_output,
fluid_observer_contact);
    |                                          ^~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:403:9: error:
'periodic_condition' was not declared in this scope
 403 |        periodic_condition.update_cell_linked_list_.parallel_exec();
    |        ^~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:407:33:
error: 'class SPH::ElasticSolidParticles' has no member named
'initializeNormalDirectionFromBodyShape'
 407 |        inserted_body_particles.initializeNormalDirectionFromBodyShape();
    |                               ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:409:9: error:
'inserted_body_corrected_configuration' was not declared in this scope
 409 |        inserted_body_corrected_configuration.parallel_exec();
    |        ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:413:20:
error: 'size_t SPH::SPHSystem::restart_step_' is protected within this context
 413 |        if (system.restart_step_ != 0) {
    |                   ^~~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
         from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
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                     from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
                     from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
                     from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:100:12: note: declared
protected here
  100 |    size_t restart_step_;        /**< restart step */
      |           ^~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:413:20:
note: field 'size_t SPH::SPHSystem::restart_step_' can be accessed via 'size_t
SPH::SPHSystem::RestartStep()'
  413 |       if (system.restart_step_ != 0) {
      |                  ^~~~~~~~~~~~
      |                  RestartStep()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:414:92:
error: 'size_t SPH::SPHSystem::restart_step_' is protected within this context
  414 |          GlobalStaticVariables::physical_time_ =
restart_io.readRestartFiles(system.restart_step_);
      |                                                           ^~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
                     from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
                     from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
                     from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
                     from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:100:12: note: declared
protected here
  100 |    size_t restart_step_;        /**< restart step */
      |           ^~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:414:92:
note: field 'size_t SPH::SPHSystem::restart_step_' can be accessed via 'size_t
SPH::SPHSystem::RestartStep()'
  414 |          GlobalStaticVariables::physical_time_ =
restart_io.readRestartFiles(system.restart_step_);
      |                                                           ^~~~~~~~~~~~
      |                                                           RestartStep()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:420:17:
error: 'inserted_body_contact' was not declared in this scope; did you mean
'inserted_body_particles'?
  420 |          inserted_body_contact.updateConfiguration();
      |              ^~~~~~~~~~~~~~~~~~~~
      |              inserted_body_particles
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:421:45:
error: 'class SPH::solid_dynamics::UpdateElasticNormalDirection' has no member named
'parallel_exec'
  421 |          inserted_body_update_normal.parallel_exec();
      |                                      ^~~~~~~~~~~~
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/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:426:46:
error: 'size_t SPH::SPHSystem::restart_step_' is protected within this context
  426 |        size_t number_of_iterations = system.restart_step_;
      |                                             ^~~~~~~~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
             from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
             from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
             from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
             from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:100:12: note: declared
protected here
  100 |     size_t restart_step_;        /**< restart step */
      |            ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:426:46:
note: field 'size_t SPH::SPHSystem::restart_step_' can be accessed via 'size_t
SPH::SPHSystem::RestartStep()'
  426 |        size_t number_of_iterations = system.restart_step_;
      |                                             ^~~~~~~~~~~~~
      |                                             RestartStep()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:437:9: error:
'tick_count' was not declared in this scope
  437 |        tick_count t1 = tick_count::now();
      |        ^~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:437:9: note:
suggested alternatives:
In file included from /home/mirzaei/vcpkg/installed/x64-linux/include/tbb/tick_count.h:17,
             from /home/mirzaei/sphinxsys/src/shared/common/large_data_containers.h:40,
             from /home/mirzaei/sphinxsys/src/shared/common/base_data_package.h:33,
             from /home/mirzaei/sphinxsys/src/shared/adaptations/adaptation.h:32,
             from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:38,
             from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
             from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
             from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
             from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/vcpkg/installed/x64-linux/include/oneapi/tbb/tick_count.h:31:7:
note:   'tbb::detail::d1::tick_count'
   31 | class tick_count {
      |       ^~~~~~~~~~
/home/mirzaei/vcpkg/installed/x64-linux/include/oneapi/tbb/tick_count.h:31:7:
note:   'tbb::detail::d1::tick_count'
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:438:9: error:
'tick_count' is not a class, namespace, or enumeration
  438 |        tick_count::interval_t interval;
      |        ^~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:452:49:
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error: 'class SPH::TimeStepInitialization' has no member named 'parallel_exec'
 452 |                 initialize_a_fluid_step.parallel_exec();
     |                                        ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:453:65:
error: 'class SPH::fluid_dynamics::AdvectionTimeStepSize' has no member named
'parallel_exec'
 453 |                 Dt = get_fluid_advection_time_step_size.parallel_exec();
     |                                                         ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:454:53:
error: 'using DensitySummationComplex =
SPH::fluid_dynamics::BaseDensitySummationComplex<SPH::Inner<>, SPH::Contact<> >' {aka
'class SPH::ComplexInteraction<SPH::fluid_dynamics::DensitySummation<SPH::Inner<>,
SPH::Contact<> > >'} has no member named 'parallel_exec'
 454 |                 update_density_by_summation.parallel_exec();
     |                                             ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:455:25:
error: 'viscous_acceleration_and_transport_correction' was not declared in this scope
 455 |                 viscous_acceleration_and_transport_correction.parallel_exec(Dt);
     |                 ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:458:25:
error: 'fluid_force_on_inserted_body' was not declared in this scope
 458 |                 fluid_force_on_inserted_body.viscous_force_.parallel_exec();
     |                 ^~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:460:53:
error: 'class SPH::solid_dynamics::UpdateElasticNormalDirection' has no member named
'parallel_exec'
 460 |                 inserted_body_update_normal.parallel_exec();
     |                                             ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:465:68:
error: 'class SPH::fluid_dynamics::AcousticTimeStepSize' has no member named
'parallel_exec'
 465 |                 dt = SMIN(get_fluid_time_step_size.parallel_exec(), Dt);
     |                                                    ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:467:33:
error: 'pressure_relaxation' was not declared in this scope
 467 |                     pressure_relaxation.parallel_exec(dt);
     |                     ^~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:471:33:
error: 'density_relaxation' was not declared in this scope
 471 |                     density_relaxation.parallel_exec(dt);
     |                     ^~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:476:92:
error: 'class SPH::SimpleDynamics<SPH::solid_dynamics::InitializeDisplacement>' has no
member named 'parallel_exec'
 476
|                     average_velocity_and_acceleration.initialize_displacement_.parallel_exec(
);
```

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                                        |                                   ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:479:92:
error: 'class SPH::solid_dynamics::AcousticTimeStepSize' has no member named
'parallel_exec'
  479 |                          dt_s =
SMIN(inserted_body_computing_time_step_size.parallel_exec(), dt - dt_s_sum);
      |                                   ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:480:41:
error: 'inserted_body_stress_relaxation_first_half' was not declared in this scope
  480 |                         inserted_body_stress_relaxation_first_half.parallel_exec(dt_s);
      |                         ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:481:41:
error: 'constrain_leaflet_base' was not declared in this scope
  481 |                         constrain_leaflet_base.parallel_exec();
      |                         ^~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:482:41:
error: 'inserted_body_stress_relaxation_second_half' was not declared in this scope
  482
|                         inserted_body_stress_relaxation_second_half.parallel_exec(dt_s);
      |                         ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:486:84:
error: 'class
SPH::SimpleDynamics<SPH::solid_dynamics::UpdateAverageVelocityAndAcceleration>' has no
member named 'parallel_exec'
  486
|                     average_velocity_and_acceleration.update_averages_.parallel_exec(dt);
      |                                               ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:491:50:
error: 'class ParabolicInflow' has no member named 'parallel_exec'
  491 |                     parabolic_inflow.parallel_exec();
      |                              ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:501:123:
error: 'size_t SPH::SPHSystem::restart_step_' is protected within this context
  501 |                 if (number_of_iterations % restart_output_interval == 0 &&
number_of_iterations != system.restart_step_)
      |                                                                   ^~~~~~~~~~~~
~~
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:46,
           from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
           from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
           from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
           from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/sphinxsys_system/sph_system.h:100:12: note: declared
protected here
  100 |    size_t restart_step_;        /**< restart step */
      |         ^~~~~~~~~~~~
```

```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:501:123:
note: field 'size_t SPH::SPHSystem::restart_step_' can be accessed via 'size_t
SPH::SPHSystem::RestartStep()'
  501 |                              if (number_of_iterations % restart_output_interval == 0 &&
number_of_iterations != system.restart_step_)
      |                                                                                    ^~~~~~~~~~~
~~
      |                                                                                    RestartStep()
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:514:25:
error: 'inserted_body_contact' was not declared in this scope; did you mean
'inserted_body_particles'?
  514 |                   inserted_body_contact.updateConfiguration();
      |                   ^~~~~~~~~~~~~~~~~~~~~
      |                   inserted_body_particles
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:519:27:
error: expected ';' before 't2'
  519 |              tick_count t2 = tick_count::now();
      |                        ^~~
      |                        ;
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:521:35:
error: 'class SPH::fluid_dynamics::VorticityInner' has no member named 'parallel_exec'
  521 |              compute_vorticity.parallel_exec();
      |                                ^~~~~~~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:526:27:
error: expected ';' before 't3'
  526 |              tick_count t3 = tick_count::now();
      |                        ^~~
      |                        ;
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:527:17:
error: 'interval' was not declared in this scope
  527 |              interval += t3 - t2;
      |              ^~~~~~~~
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:527:29:
error: 't3' was not declared in this scope; did you mean 'tm'?
  527 |              interval += t3 - t2;
      |                          ^~
      |                          tm
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:527:34:
error: 't2' was not declared in this scope; did you mean 'tm'?
  527 |              interval += t3 - t2;
      |                               ^~
      |                               tm
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:529:19:
error: expected ';' before 't4'
  529 |       tick_count t4 = tick_count::now();
      |                  ^~~
      |                  ;
```

/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:531:9: error: 'tick_count' is not a class, namespace, or enumeration
```
  531 |       tick_count::interval_t tt;
      |       ^~~~~~~~~~
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:532:9: error: 'tt' was not declared in this scope; did you mean 'dt'?
```
  532 |       tt = t4 - t1 - interval;
      |       ^~
      |       dt
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:532:14: error: 't4' was not declared in this scope; did you mean 'tm'?
```
  532 |       tt = t4 - t1 - interval;
      |            ^~
      |            tm
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:532:19: error: 't1' was not declared in this scope; did you mean 'y1'?
```
  532 |       tt = t4 - t1 - interval;
      |                 ^~
      |                 y1
```
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:532:24: error: 'interval' was not declared in this scope
```
  532 |       tt = t4 - t1 - interval;
      |                      ^~~~~~~~
```
In file included from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
                 from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
                 from /home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/bodies/base_body.h: In instantiation of 'SPH::RealBody::RealBody(Args&& ...) [with Args = {SPH::SPHSystem&, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >&, std::shared_ptr<SPH::SPHAdaptation>}]':
/home/mirzaei/sphinxsys/src/shared/bodies/solid_body.h:51:47:   required from 'SPH::SolidBody::SolidBody(Args&& ...) [with Args = {SPH::SPHSystem&, std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >&, std::shared_ptr<SPH::SPHAdaptation>}]'
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:163:84:   required from here
/home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:217:42: error: no matching function for call to 'SPH::SPHBody::SPHBody(SPH::SPHSystem&, std::__cxx11::basic_string<char>&, std::shared_ptr<SPH::SPHAdaptation>)'
```
  217 |       cell_linked_list_created_(false)
      |                                      ^
```
/home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:83:5: note: candidate: 'SPH::SPHBody::SPHBody(SPH::SPHSystem&, SPH::SharedPtr<SPH::Shape>)'
```
   83 |    SPHBody(SPHSystem &sph_system, SharedPtr<Shape> shape_ptr);
      |    ^~~~~~~
```

/home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:83:5: note: candidate expects 2 arguments, 3 provided
/home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:82:5: note: candidate: 'SPH::SPHBody::SPHBody(SPH::SPHSystem&, SPH::SharedPtr<SPH::Shape>, const string&)'
   82 | SPHBody(SPHSystem &sph_system, SharedPtr<Shape> shape_ptr, const std::string &body_name);
      | ^~~~~~~
/home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:82:53: note: no known conversion for argument 2 from 'std::__cxx11::basic_string<char>' to 'SPH::SharedPtr<SPH::Shape>' {aka 'std::shared_ptr<SPH::Shape>'}
   82 | SPHBody(SPHSystem &sph_system, SharedPtr<Shape> shape_ptr, const std::string &body_name);
      | ~~~~~~~~~~~~~~~~~^~~~~~~~~
In file included from /usr/include/x86_64-linux-gnu/c++/9/bits/c++allocator.h:33,
                 from /usr/include/c++/9/bits/allocator.h:46,
                 from /usr/include/c++/9/string:41,
                 from /usr/include/c++/9/stdexcept:39,
                 from /usr/include/c++/9/array:39,
                 from /usr/include/c++/9/tuple:39,
                 from /usr/include/c++/9/functional:54,
                 from /usr/include/c++/9/pstl/glue_algorithm_defs.h:13,
                 from /usr/include/c++/9/algorithm:71,
                 from /home/mirzaei/sphinxsys/src/shared/common/base_data_type.h:32,
                 from /home/mirzaei/sphinxsys/src/for_2D_build/common/data_type.h:32,
                 from /home/mirzaei/sphinxsys/src/shared/common/vector_functions.h:31,
                 from /home/mirzaei/sphinxsys/src/shared/common/array_allocation.h:31,
                 from /home/mirzaei/sphinxsys/src/shared/common/base_data_package.h:31,
                 from /home/mirzaei/sphinxsys/src/shared/adaptations/adaptation.h:32,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/base_body.h:38,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/base_body_part.h:33,
                 from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:34,
                 from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
                 from /home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/usr/include/c++/9/ext/new_allocator.h: In instantiation of 'void __gnu_cxx::new_allocator<_Tp>::construct(_Up*, _Args&& ...) [with _Up = SPH::ParticleGeneratorLattice; _Args = {}; _Tp = SPH::ParticleGeneratorLattice]':
/usr/include/c++/9/bits/alloc_traits.h:483:4:   required from 'static void std::allocator_traits<std::allocator<_Tp> >::construct(std::allocator_traits<std::allocator<_Tp> >::allocator_type&, _Up*, _Args&& ...) [with _Up = SPH::ParticleGeneratorLattice; _Args = {}; _Tp = SPH::ParticleGeneratorLattice; std::allocator_traits<std::allocator<_Tp> >::allocator_type = std::allocator<SPH::ParticleGeneratorLattice>]'
/usr/include/c++/9/bits/shared_ptr_base.h:548:39:   required from 'std::_Sp_counted_ptr_inplace<_Tp, _Alloc, _Lp>::_Sp_counted_ptr_inplace(_Alloc, _Args&& ...) [with _Args = {}; _Tp = SPH::ParticleGeneratorLattice; _Alloc = std::allocator<SPH::ParticleGeneratorLattice>; __gnu_cxx::_Lock_policy _Lp = __gnu_cxx::_S_atomic]'

/usr/include/c++/9/bits/shared_ptr_base.h:679:16:   required from
'std::__shared_count<_Lp>::__shared_count(_Tp*&, std::_Sp_alloc_shared_tag<_Alloc>,
_Args&& ...) [with _Tp = SPH::ParticleGeneratorLattice; _Alloc =
std::allocator<SPH::ParticleGeneratorLattice>; _Args = {}; __gnu_cxx::_Lock_policy _Lp =
__gnu_cxx::_S_atomic]'
/usr/include/c++/9/bits/shared_ptr_base.h:1344:71:   required from 'std::__shared_ptr<_Tp,
_Lp>::__shared_ptr(std::_Sp_alloc_shared_tag<_Tp>, _Args&& ...) [with _Alloc =
std::allocator<SPH::ParticleGeneratorLattice>; _Args = {}; _Tp = SPH::ParticleGeneratorLattice;
__gnu_cxx::_Lock_policy _Lp = __gnu_cxx::_S_atomic]'
/usr/include/c++/9/bits/shared_ptr.h:359:59:   required from
'std::shared_ptr<_Tp>::shared_ptr(std::_Sp_alloc_shared_tag<_Tp>, _Args&& ...) [with _Alloc =
std::allocator<SPH::ParticleGeneratorLattice>; _Args = {}; _Tp = SPH::ParticleGeneratorLattice]'
/usr/include/c++/9/bits/shared_ptr.h:701:14:   required from 'std::shared_ptr<_Tp>
std::allocate_shared(const _Alloc&, _Args&& ...) [with _Tp = SPH::ParticleGeneratorLattice;
_Alloc = std::allocator<SPH::ParticleGeneratorLattice>; _Args = {}]'
/usr/include/c++/9/bits/shared_ptr.h:717:39:   required from 'std::shared_ptr<_Tp>
std::make_shared(_Args&& ...) [with _Tp = SPH::ParticleGeneratorLattice; _Args = {}]'
/home/mirzaei/sphinxsys/src/shared/common/ownership.h:161:31:   required from
'SPH::SharedPtr<T> SPH::makeShared(Args&& ...) [with T = SPH::ParticleGeneratorLattice;
Args = {}; SPH::SharedPtr<T> = std::shared_ptr<SPH::ParticleGeneratorLattice>]'
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:269:110:   re
quired from here
/usr/include/c++/9/ext/new_allocator.h:146:4: error: no matching function for call to
'SPH::ParticleGeneratorLattice::ParticleGeneratorLattice()'
  146 | { ::new((void *)__p) _Up(std::forward<_Args>(__args)...); }
      | ^~~~~~~
In file included from /home/mirzaei/sphinxsys/src/shared/particles/solid_particles.h:36,
            from
/home/mirzaei/sphinxsys/src/shared/particle_dynamics/fluid_dynamics/base_fluid_dynamics.h:3
5,
            from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/unstructured_mesh.h:31,
            from
/home/mirzaei/sphinxsys/src/shared/bodies/complex_bodies/all_complex_bodies.h:33,
            from /home/mirzaei/sphinxsys/src/shared/bodies/all_bodies.h:35,
            from /home/mirzaei/sphinxsys/src/shared/include/sphinxsys.h:31,
            from
/home/mirzaei/sphinxsys/tests/2d_examples/test_2d_aortic_valve/aortic_valve.cpp:10:
/home/mirzaei/sphinxsys/src/shared/particle_generator/particle_generator_lattice.h:68:14: note:
candidate: 'SPH::ParticleGeneratorLattice::ParticleGeneratorLattice(SPH::SPHBody&)'
  68 | explicit ParticleGeneratorLattice(SPHBody &sph_body);
      | ^~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/particle_generator/particle_generator_lattice.h:68:14:
note: candidate expects 1 argument, 0 provided
/home/mirzaei/sphinxsys/src/shared/particle_generator/particle_generator_lattice.h:65:7: note:
candidate: 'SPH::ParticleGeneratorLattice::ParticleGeneratorLattice(const
SPH::ParticleGeneratorLattice&)'

```
   65 | class ParticleGeneratorLattice : public BaseParticleGeneratorLattice, public
ParticleGenerator
      |       ^~~~~~~~~~~~~~~~~~~~~~~
/home/mirzaei/sphinxsys/src/shared/particle_generator/particle_generator_lattice.h:65:7:
note:   candidate expects 1 argument, 0 provided
cc1plus: all warnings being treated as errors
make[2]: ***
[tests/2d_examples/test_2d_aortic_valve/CMakeFiles/test_2d_aortic_valve.dir/build.make:66:
tests/2d_examples/test_2d_aortic_valve/CMakeFiles/test_2d_aortic_valve.dir/aortic_valve.cpp.o
] Error 1
make[1]: *** [CMakeFiles/Makefile2:3149:
tests/2d_examples/test_2d_aortic_valve/CMakeFiles/test_2d_aortic_valve.dir/all] Error 2
make: *** [Makefile:95: all] Error 2
```