

de.rollercoaster.physics

<<Interface>>
Trajectory

+computeTimeStep(double timeDiff) : void
+getState() : TrajectoryPoint

<<Interface>>
TrajectoryPoint

+getVelocity() : Vector3f
+getAcceleration() : Vector3f
+getPosition() : Vector3f

RollercoasterTrajectory

-positions : double[]
-time : double
-gravitation : Vector3f
-integrator : Integrator

+RollercoasterTrajectory(curve : Curve, s0 : double, v0 : double)
+computeTimeStep(double timeDiff) : void
-updateState(deltaTime : double) : void
+getState() : TrajectoryPoint
+getDerivatives(t : double, x : double []) : double []

SimpleTrajectoryPoint

-Vector3f velocity
-Vector3f acceleration
-Vector3f jerk

+SimpleTrajectoryPoint(CurvePoint point, Ve...

-state
1

1 -curve

1

-integrator

Curve

Integrator

DifferentialEquations