

# Hertz Contact Mechanics - Physics Setup

Authors: Ju Hwan Shin and You Won Park

[Problem Specification](#)

[1. Pre-Analysis & Start-Up](#)

[2. Geometry](#)

[3. Mesh](#)

[4. Physics Setup](#)

[5. Numerical Solution](#)

[6. Numerical Results](#)

[7. Verification & Validation](#)

[Exercises](#)

[Comments](#)

## Physics Setup

We will demonstrate how to check material selections for the sphere and the rigid plate in our problem.

In the following video we will demonstrate how to set up the contact interface using Frictionless Contacts.

Finally, the next video shows how to apply boundary conditions, i.e. a point load at the top of the sphere and displacement constraints at the contact interface and along the axis of symmetry.

[Go to Step 5: Numerical Solution](#)

[Go to all ANSYS Learning Modules](#)