

[Alya Multiphysics Show Reel](#)

This video showcases simulation results calculated with Alya Multiphysics.

The Alya System is a Computational Mechanics code with two main features:

Firstly, it is specially designed for running with the highest efficiency standards in large scale supercomputing facilities.

Secondly, it is capable of solving different physics, each one with its own modelization characteristics, in a coupled way.

Both main features are intimately related, meaning that all complex coupled problems solved by Alya must retain the efficiency.

Among the problems it solves are Incompressible Flows, Compressible Flows, Non-linear Solid Mechanics, Species transport equations, Excitable Media, Thermal Flows, and N-body collisions.

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