The Alya System - Large Scale Computational Mechanics

Overview:

The Alya System is the BSC simulation code for **multi-physics problems**, specifically designed to run efficiently in **supercomputers**.

In Alya, these two main features are complementary, which makes the code especially well-suited to simulate complex problem in different domains of Science and Technology.

Among the problems Alya can simulate are:

- Incompressible Flows
- Compressible Flows
- Non-linear Solid Mechanics
- Species transport equations
- Excitable Media
- Thermal Flows
- N-body collisions
- ...

For more information visit this link and the Gallery below.

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Gallery

In the media

Alya Multi-Physics Scaled to 100,000 Cores on NCSA Blue Waters Supercomputer (inside HPC)

Alya Red: A Computational Heart. Winner of the 2012 Visualization Challenge, hosted by Science Magazine and USA National Science Foundation NSF (Science Mag)

Featured videos