

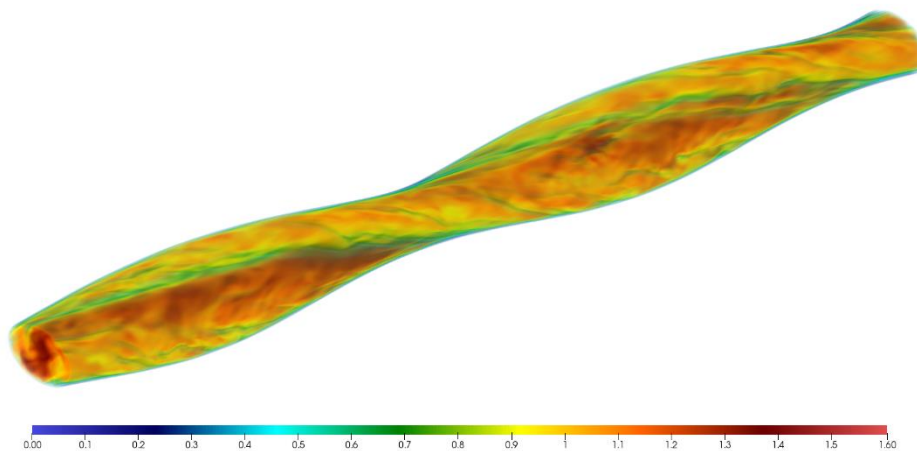
ANS Webinar  
Introduction to Nek5000  
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Nek5000 is an open-source, highly scalable, high-order, spectral-element-based computational fluid dynamics code. It combines the accuracy of spectral methods with the flexibility of the finite element method. It has been used for a wide range of applications in nuclear energy. It has the capabilities to perform DNS, LES, and unsteady RANS simulations using either an incompressible or low-Mach model. Its high-fidelity capability with the LES model has been well documented with consistent strong performance in international benchmarks. This webinar will guide users in downloading and compiling Nek5000 as well as setting up and running a simple case.

In order to follow along, attendees should have access to a computer with a Unix based operating system and basic familiarity with using the terminal along with compatible FORTRAN 77 and C compilers installed with a working MPI wrapper. Either ParaView ([www.paraview.org](http://www.paraview.org)) or VisIt is necessary for visualization of results. We strongly recommend that attendees are familiar with either tool and have one installed prior to the workshop.



LES prediction of velocity in a twisted elliptical tube