

Computational fluid dynamics for physicists and engineers (lecture)

Wednesday, 30 September 2020 14:00 (1 hour)

Computational fluid dynamics(CFD) is an interdisciplinary approach involving Physics and Computer Science which deals with solving the governing equation of fluid flow. With the increasing advancement of technology, CFD has gained a lot of popularity in wide ranging topics of Physics and Engineering.

In this lecture we will look into the basic idea behind CFD, the conservation system of equations governing fluid dynamics, physical domain and equation discretization, use of numerical methods such as Finite difference and Finite volume methods, different boundary conditions and Reimann solvers.

Lecture hours

Exercise hours

Presenter: MISHRA, Ruchi (Nicolaus Copernicus Astronomical Center)