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Dongho Chae* (chae@skku.edu), Department of Mathematics, Sungkyunkwan University,
Suwon. *Nonexistence of self-similar singularities in the Euler equations.*

In this talk show that there exists no self-similar finite time blowing up solution to the 3D incompressible Euler equations if the vorticity decays or grows sufficiently fast near infinity in \mathbb{R}^3 . We also rule out the possibilities of *asymptotically* self-similar singularities for both of the 3D Euler and the 3D Navier-Stokes equations. (Received September 09, 2006)