1053-35-228 Dongho Chae* (chae@skku.edu), Department of Mathematics, Sungkyunkwan University, Suwon, 440-746, South Korea. *Remarks on the blow-up of the axisymmetric Euler equations*.
We discuss the finite time blow-up problem for the axisymmetric 3D incompressible Euler equations with swirl. Under the assumption of local minima for the pressure on the axis of symmetry with respect to the radial variations we show that the solution blows-up in finite time. Off the axis of symmetry we show that the radial increment of pressure is not consistent with the global existence of classical solution. (Received September 05, 2009)