

# PROBABILITY DENSITY FUNCTION FOR PARTICLE ACCELERATIONS INTURBULENCE AND THE STRUCTURE OF VORTICES

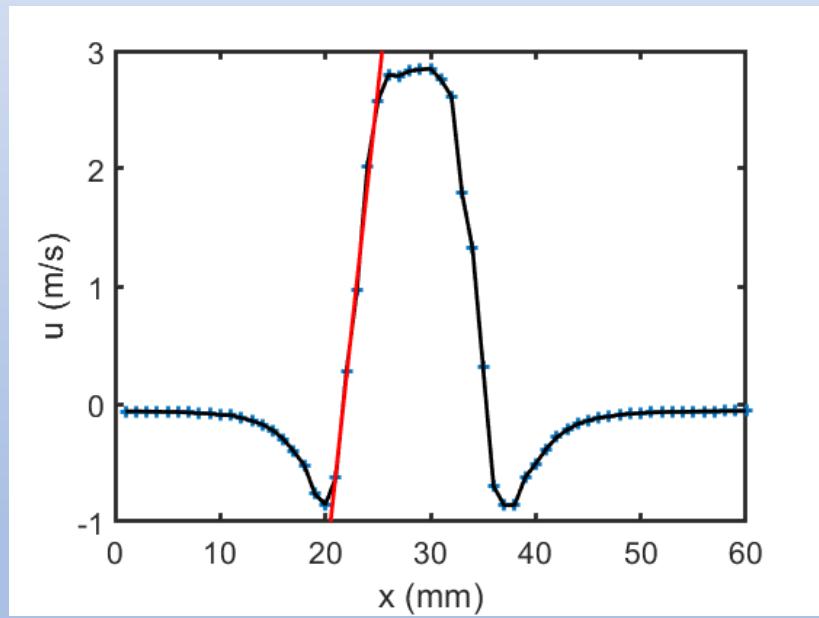
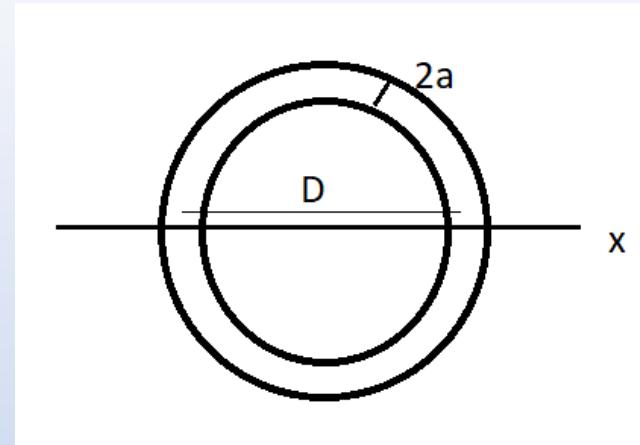
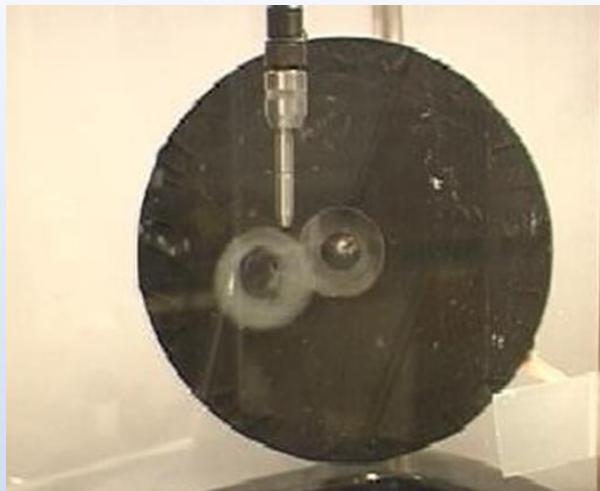
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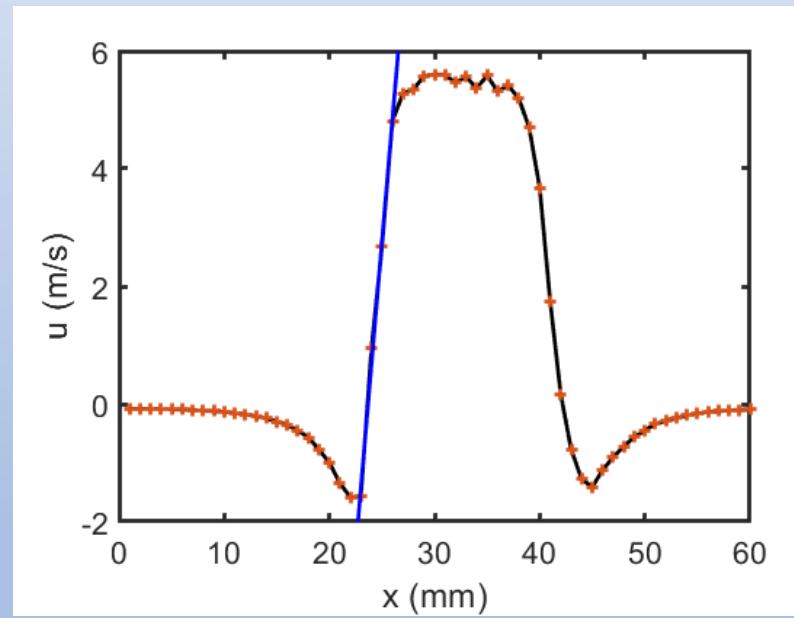
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In a laminar flow, it is possible to observe accelerations of fluid particles  
as high as those observed in turbulent flows?

We investigate the velocity and the acceleration in annular vortices



a)  $1300 \text{ m/s}^2$  for  $Re=800$



a)  $6500 \text{ m/s}^2$  for  $Re=2200$