

Vortex of Fluid Field as Viewed from Curvature

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Abstract: The vortex is a common phenomenon in fluid field. In this paper, vortex can be represented by curvature c , which varies with arc length s . The variance of point (x,y) with arc length in stream line satisfies a 2-order variable-coefficient linear ordinary differential equation. The type vortex can be analyzed qualitatively by this ordinary differential equation.

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Key words: curvature, vortex

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