

Oberseminar Mathematische Strömungsmechanik

Institut für Mathematik der Julius-Maximilians-Universität Würzburg

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On weak solutions and energy conservation for the hydrostatic incompressible Euler equations

Abstract:

A famous conjecture by Onsager relates the regularity of a weak solution of the incompressible Euler equations to energy conservation. This conjecture has been proven in recent years. In this talk we study the hydrostatic incompressible Euler equations, which describe e.g. the dynamics of the ocean. We present some recent results on our attempt to establish a relation between regularity and energy conservation for these equations, similar to Onsager's conjecture. In this context we discuss different notions of weak solutions. This talk is based on joint work with Daniel W. Boutros and Edriss S. Titi.

Raum 40.03.003 (Emil Fischer Str. 40)

Thursday, Nov. 24 at 12:30 pm

Zu diesem Vortrag sind Sie herzlich eingeladen.