



Department of Mathematics
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Seminar

*Time periodic problem of the
compressible Navier-Stokes equation
on the whole space*

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Abstract

The time-periodic problem on the compressible Navier-Stokes equations on an unbounded domain is considered. As the first step of the analysis the whole space is treated. In this case Ma, Ukai and Yang (2010) showed that for spatial dimensions greater than or equal to 5 the existence and stability of time-periodic solutions can be obtained under small time-periodic external forces. Hence it has remained unknown to solve the time-periodic problem in lower dimensional case. In these lectures I will talk about the existence and stability of time-periodic solutions when the dimensions are greater than or equal to 3.

Date: 1 March 2017 (Wednesday)

Time: 10:00am – 12:00noon (Part I)

3:00pm – 5:00pm (Part II)

Venue: Room 219, Lady Shaw Building, The Chinese University of Hong Kong

All are Welcome