



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

CHAMPP

CENTER IN HAMBURG FOR
ASTRO-, MATHEMATICAL AND
PARTICLE PHYSICS

LECTURE COURSE IN THE QUANTUM UNIVERSE RESEARCH SCHOOL

Winter Term 2023/2024

Astrophysical Gasdynamics

Stephan Rosswog

Course Description:

Gas dynamics is rather “equation heavy” and makes ample use of partial differential equations (PDEs). While being clearly a topic of theoretical physics, there are many connections to everyday life (e.g. mixing milk and coffee) and to a large variety of astrophysical phenomena (e.g. Jupiter’s Red Spot; formation of stars etc.). Also, many jobs in physics-related industry make use of fluid dynamics.

Prerequisites:

Basic theoretical physics courses. The course language is English.

Literature:

Lecture notes S. Rosswog

Date and Place: Tue, 10:00–12:15, Sonnenbau, Sternwarte Bergedorf

Problem Classes: Tue, 13:00–13:45, Sonnenbau, Sternwarte Bergedorf

Starting on: 24 October 2023
