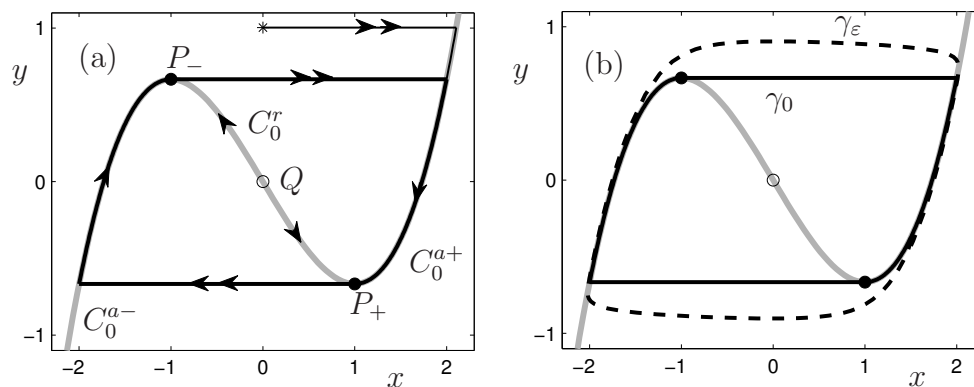


# Course Announcement: Introduction to Nonlinear Dynamics

Lecturer: **Professor Christian Kuehn, Ph.D.**

## Basic Information

- Where? - **TU Munich**, FIM, Boltzmannstr. 3, planned room: HS3 (please check during first week).
- When? Wintersemester 2017/2018, Tuesday **16:15-17:45**
- Language? - The lectures will be given in **English**; an exercise group can also be offered in German if there is demand.
- Target audience? - Anybody interested in a first introduction to nonlinear systems.
- Background? A very first exposure to ordinary differential equations in some form (usually done in part of the standard undergraduate curriculum in almost all departments at TUM).
- Duration & Type? 2 SWS - Lecture (VO) + 1 SWS Exercises (for the exercises please register separately, they are held bi-weekly; strongly recommended if you want to take the exam).
- Evaluation? - The exam will be **written** at the end of the course.
- Lecture Notes? - There will be partial (yet not yet complete) **lecture notes** for the course.



## Course Content

The course provides an introduction to results and basic mathematical methods of nonlinear dynamics. The ideas of nonlinear dynamics have now become relevant for virtually all quantitative sciences. The goal of the course is to analyze key examples, which exhibit the widely different behaviours of nonlinear systems, from basic stationarity to chaotic dynamics. Along the way, we are going to learn indispensable mathematical methods and “standard tricks”, which actually generalize far beyond the presented examples.

## Website

All relevant communication beyond this overview will be posted online, including lecture notes, announcements, and so on. Please check: [TUM Moodle!](#)