Honz Research Institute of Pharmacometrics and Industrial Engineering
HRIPIE
MA102 Mathematics II
Spring 2021

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**Time** TBD (Beijing)

**Length** 22 Feb - 18 Jun 2021

**Location** Bernhard Riemann Room

**Grade** P/F

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# *Mathematics* at HRIPIE

The MA101/MA102 sequence aims to provide demanding mathematical education to pharmacometricians and industrial engineers (that one cannot find it anywhere else). Reserved as a brave and exploratory learning experience without participant's concern for immediate application, HRIPIE Mathematics emphasizes thinking of mathematical essence behind domain knowledge, representing applied problem in mathematical language, and collaborating with mathematicians in an effective way (but yourself not need to be one of them). It encourages pharmacometricians and industrial engineers to produce timeless and influential works by solving hard-core mathematical question less observed.

The content in this lecture series will be intensive, self-contained, and tailored to specific student's background as much as we can. It requires mathematical rigor and conceptual clear, up to being able to appreciate more advanced material and to communicate with mathematicians. Being able to construct a proof is often not required, but will be the case if it serves the purpose aforementioned.

# Introduction

In Spring, MA102 will focus on computational conformal geometry (CCG).

# Reference Material

- CMU *Discrete Differential Geometry* (Spring 2020)
- Computational Conformal Geometry lecture by David Gu (Summer 2020)

# Course Page

`https://github.com/NanFangHong/HRIPIE-MA102`

Last update of this sheet: February 9, 2021