

# Michal Pešta

## Pedagogical Activities (last 3 years)

### Lectures

- Winter 19/20 **NMFM301**, *Statistika pro finanční matematiky*, 4/2, (myself 4/0).
- Summer 18/19 **NMFM404**, *Selected Software Tools for Finance and Insurance*, 2/0, (2/0).  
Winter 18/19 **NMFM301**, *Statistika pro finanční matematiky*, 4/2, (4/0).
- Summer 17/18 **NMFM404**, *Selected Software Tools for Finance and Insurance*, 2/0, (2/0).  
Winter 17/18 **NMFM301**, *Statistika pro finanční matematiky*, 4/2, (4/0).
- Summer 16/17 **NMFM404**, *Selected Software Tools for Finance and Insurance*, 2/0, (2/0).  
Winter 16/17 **NMFM301**, *Statistika pro finanční matematiky*, 4/2, (4/0).

### Exercises

- Winter 19/20 **NMFM401**, *Mathematics of Non-Life Insurance 1*, 2/2, (0/2).
- Summer 18/19 **NMFM202**, *Pravděpodobnost pro finanční matematiky*, 4/2, (0/2).  
Summer 18/19 **NMFM402**, *Mathematics of Non-Life Insurance 2*, 2/2, (0/2).  
Winter 18/19 **NMFM401**, *Mathematics of Non-Life Insurance 1*, 2/2, (0/2).
- Summer 17/18 **NMFM202**, *Pravděpodobnost pro finanční matematiky*, 4/2, (0/2).  
Summer 17/18 **NMFM402**, *Mathematics of Non-Life Insurance 2*, 2/2, (0/2).  
Winter 17/18 **NMFM401**, *Mathematics of Non-Life Insurance 1*, 2/2, (0/2).  
Winter 17/18 **NMST531**, *Censored Data Analysis*, 2/2, (0/2).
- Summer 16/17 **NMFM202**, *Pravděpodobnost pro finanční matematiky*, 4/2, (0/2).  
Summer 16/17 **NMFM402**, *Mathematics of Non-Life Insurance 2*, 2/2, (0/2).  
Winter 16/17 **NMFM401**, *Mathematics of Non-Life Insurance 1*, 2/2, (0/2).  
Winter 16/17 **NMST531**, *Censored Data Analysis*, 2/2, (0/2).

### Seminars

- Winter 19/20 **NMMA366**, *Matematické metody v praxi*, 0/1.
- Summer 18/19 **NMMA366**, *Matematické metody v praxi*, 0/1.
- Winter 18/19 **NMMA366**, *Matematické metody v praxi*, 0/1.

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## Bachelor Theses

- September 2019 **Stochasticke pristupy pre rozdelenie agregovanych skod**, MFAPM, defended.  
Bc. Katarína Kirešová
- September 2017 **Problém nejbližší korelační matici**, MOM, defended.  
Bc. Martina Sotáková
- June 2017 **Mixed Poisson models for claim counts**, MOM, defended.  
Bc. Filip Hauptfleisch
- Stochasticke procedury pro distribuci agregovanych skod**, MFAPM, in preparation.  
Jana Procházková
- Stochasticke rezervovani škod pomocí dvojitého chain ladderu**, MFAPM, in preparation.  
Tereza Javůrková
- Useknutá data**, MOM, in preparation.  
Redek David

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## Master Theses

- September 2019 **Micro-level stochastic claims reserving**, MFAPM, defended.  
Mgr. Marek Rathouský
- September 2019 **Actuarial and exposure-based models for hail peril**, MFAPM, defended.  
Bc. Matúš Drobuliak
- February 2019 **Claims reserve volatility and bootstrap with application on historical data with trend in claims development**, MFAPM, defended.  
Mgr. Kateřina Malíková
- September 2018 **Non-homogeneous Poisson process – estimation and simulation**, MFAPM, defended.  
Mgr. Anna Vedyushenko
- June 2018 **Truncated data and stochastic claims reserving**, MFAPM, defended.  
Mgr. Dominik Marko
- June 2018 **Structural equation models with application in social sciences**, MFAPM, defended.  
Mgr. Václav Veselý
- January 2018 **Hurdle models in non-life insurance**, MFAPM, defended.  
Mgr. Cheng Tian
- January 2018 **Loss reserving for individual claim-by-claim data**, MFAPM, defended.  
RNDr. Vojtěch Bednářík
- June 2017 **Tweedie models for pricing and reserving**, MFAPM, defended.  
Mgr. Tereza Smolárová
- Analysis of several acceleration techniques for life insurance liability value determination**, MFAPM, in preparation.  
Bc. Matěj Drahokoupil
- Total least squares and their asymptotic properties**, MFAPM, in preparation.  
Bc. Karel Chuchel
- Multivariate generalized autoregressive conditional heteroscedasticity models**, MPMSE, in preparation.  
Bc. Nováková Martina
- Various change point estimation methods**, MPMSE, in preparation.  
Bc. Šimonová Soňa

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## Rigorous Thesis

- May 2018 **Loss reserving for individual claim-by-claim data**, MFAPM, defended.  
RNDr. Bednářík Vojtěch

October 2016 **Large claims modeling**, *MFAPM*, defended.  
RNDr. Ing. Barbora Petrová, Ph.D.

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## Consultant for Doctoral Thesis

**Quantiles and ranks in linear and multivariate models**, *4M9*, in preparation.  
Xeniya Yermolenko

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## Supervised Theses in Total

Rigorous	2 defended
Master	20 defended, 4 in progress
Bachelor	15 defended, 3 in progress

Prague, December 29, 2019