# SLIM Group Overview

Seismic Laboratory for Imaging and Modeling
Earth & Ocean Sciences
University of British Columbia

# Faculty
# Felix Herrmann (Ph.D.)

✦ M.Sc. & Ph.D., Delft University, Netherlands

✦ Seismic imaging and inversion

✦ Harmonic analysis (Wavelets)

   in geophysical inverse problem

✦ Scaling (Multi-fractal) concepts

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# Additional faculty
# Michael Friedlaender (Ph.D.)



- ✦ Fellow Argonne

- ✦ B.A., Cornell,  MSc. & Ph.D., Stanford

- ✦ Numerical optimization

- ✦ Numerical linear algebra

- ✦ Design & implementation of constrained optimization

- ✦ Scientific computing

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# Additional faculty
# Ozgur Yilmaz (Ph.D.)



- ✦ M.A., Bogazici University, Turkey
- ✦ Ph.D., Princeton
- ✦ Applied harmonic analysis
- ✦ Signal processing
- ✦ Information theory

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# Visiting faculty
# Deli Wang (Ph.D.)

✦ M.Sc., Changchun College of Geology, China

✦ Ph.D., Jinlin University ,China

✦ Seismic imaging and inversion

✦ Seismic anisotropy

✦ Forward modeling

✦ Multiple attenuation

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# Additional Faculty
# Henryk Modzelewski (Ph.D.)



✦ Ph.D. in Atmospheric Sciences, UBC

✦ Scientific programming

  ✦ High-Performance Computing

  ✦ Development: MPI and Python

✦ System administration

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# Post-Doc. Fellow
# Challa S. Sastry

- Ph.D. in Mathematics,IIT, India
- Wavelets & Applications
- Computerized Tomography
- Image Analysis

# Ph.D. student
# Peyman Moghaddam



- ✦ B.Sc. & M.Sc. in Electrical Eng., Tehran Polytechnic, Iran
- ✦ Statistical Signal Processing
- ✦ Imaging Optimization
- ✦ Parallel Programming
- ✦ Migration

# Ph.D. student
# Gilles Hennenfent



✦ DEA (MSc level) in Photonics, Image & Cybernetics, Universite Louis Pasteur, France, 2000

✦ Engineer in Applied Physics, Ecole Nationale Superieure de Physique de Strasbourg,(2000-2003)

✦ Data regularization

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# Ph.D. Student Rayan Saab

- M.A.Sc. in Electrical Eng., UBC

- B.E. in Computer and Communications Eng., American Univ. of Beirut

- Blind Source Separation

- Statistical Signal Processing

- Discrete Optimization

- Seismic and Biomedical Signal Processing

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# Ph.D. Student
# Ewout Van Den Berg
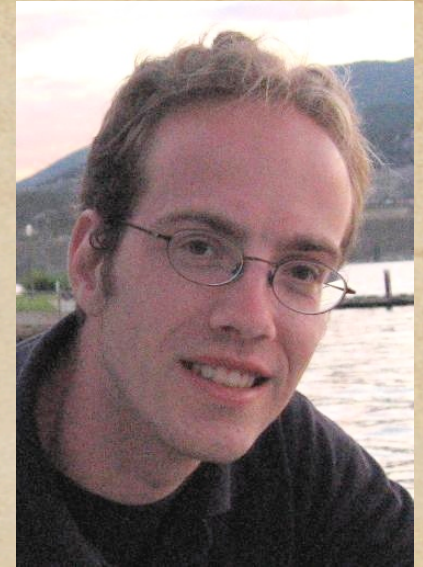


- ✦ B.Sc., and M.Sc. in Computer Sciences, Delft
- ✦ Ph.D. in Computer Sciences, UBC
- ✦ L1 minimization
- ✦ Sparse signal recovery
- ✦ Seismic signal processing

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# M.A.Sc. Student
# Carson Yarham

- B.Sc. in Honors Geophysics, UBC
- Signal Separation
- Matlab algorithm development
- Curvelet domain filtering

# M.A.Sc. Student
# Mohammad Maysami

- B.Sc. in Petroleum Eng., Sharif Univ., Tehran
- B.Sc. in Electrical Eng., Sharif Univ., Tehran
- M.A.Sc in Geophysics, UBC
- Seismic Signal Characterization
- Well Log - Seismic Data Tie

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# M.A.Sc. Student
# Vishal Kumar



- ✦ M.Sc. in Exploration Geophysics, IIT.
- ✦ Joined to SLIM recently

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# M.Sc. Student
# Evgeniy Lebed



- ✦ B.Sc. in Mathematics (honors) from Simon Fraser University

- ✦ M.Sc. in Math, UBC

- ✦ Multidimensional signal decomposition

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# Scientific Programmer
# Cody Brown



- B.Sc., Computer Science, UBC

# Summer Co-Op
# Sean Ross-Ross



✦ Undergrad in Computer Science, UBC

✦ Joined SLIM in 2006

✦ Software Development

✦ Development of SLIMpy

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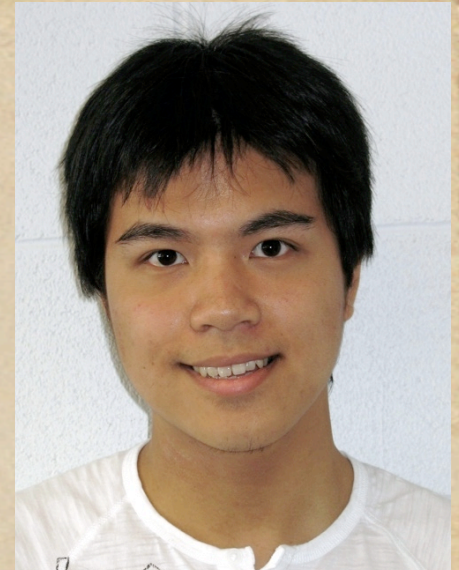
# Summer Co-Op
## Tim Lin

- 3rd year Undergraduate in Hon. Physics, UBC

- Joined SLIM in 2006 as summer co-op student

- Compressed Wavefield Migration and Imaging

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