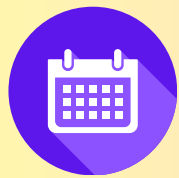


# RESEARCH WORKSHOP ON ANALYSIS AT SLU

Third in the Mentoring Math Minds (MMM) workshop series; Research workshop on Analysis.



## WHERE & WHEN

Thursday, November 21  
9:00 am - 12:00 pm  
Saint Louis University, Main  
Campus, BSC 254



## WHO CAN ATTEND

Open to students of all majors. Prerequisites are matrices, inner products, and eigenvalues



## MORE INFO

- There is NO COST to attend but REGISTER QUICKLY TO SECURE YOUR SPOT.

<https://forms.gle/TPc755rMRg2kgk9LA>

Saint Louis University  
College of Arts and Sciences  
Mathematics and Statistics  
Department

Questions? Contact: [mentoring.math@slu.edu](mailto:mentoring.math@slu.edu)

## Mini-Lecture on Gabor Analysis

- Get an intuition of the concept of finite-dimensional time-frequency setting
- Applications, like filtering in the  $tf$ -domain and multipliers
- Presented by Daniel Haider

## Mini-Lecture on Frame Theory

- Introduction of the concept of frame theory from a linear algebraic point of view
- The infinite-dimensional setting of frames and understanding that frames perform the perfect reconstruction
- Presented by Lukas Köhldorfer

## Research Talk

- Discuss how the redundancy of frames allows for reconstruction
- Discuss phase retrieval problem where we can only obtain the magnitude of the measurements
- Presented by Daniel Freeman