

Annual Report (July 1, 2022 - June 30th 2023)

Center for Applied Mathematics and Statistics (CAMS)

Director: Jiguang Sun

09/25/2023

1. Mission Statement

The mission of CAMS is to promote interdisciplinary research among mathematicians, statisticians, scientists, and engineers, and provide statistical consulting service for Michigan Tech and the community.

2. Activities and Highlights

3.a Primary activities and highlights - (i) CAMS director works with the management committee (3 members) to operate the center. (ii) The individual needs to be an active MTU researcher in an area related to the mission of CAMS. (iii) We had one new member last year. (iv) Invite the member to attend the seminars and the summer workshop. Encourage the statisticians to offer consulting services.

(1) Statistical Consulting Service

The statisticians of CAMS (Kui Zhang, Fan Dai, Byungjun Kim, Ray Molzon, Xiao Zhang) continued to provide free statistical consulting services for Tech faculty, students, and staff in 22-23 (Fall 23, Spring 23, Fall 22, Spring 2022, Summer 2021, Fall 2022).

(2) CAMS members elected the management committee: Snehamoy Chatterjee, Jingfeng Jiang, Kui Zhang, Dec, 2022.

(3) CAMS Charter was approved in Spring 2023.

(4) Joint CAMS and Math Seminars

- Haoming Zhou, Inverse Weak Adversarial Networks (iWAN): A computational Method for High-dimensional Inverse Problems, Georgia Tech., 09/16/2022.
- Jie Shen, Efficient Structure Preserving Schemes for Complex Nonlinear Systems, Purdue University, 9/23/2022.
- Matthew Roberts, Peak Matching for Direct Analysis in Real Time Mass Spectrometry (DART-MS), IDA, 10/28/2022.
- Shuhao Cao, Transformer x Finite Element Methods, University of Missouri–Kansas City, 11/04/2022.

