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## Health AI and Data Science (HAD) Journal Club Series

# Differential Geometry Meets Medicine: Shaping the Future of Computational Healthcare

Tuesday, April 1st, 2025 | 3:00 PM – 4:00 PM

### Learning Objectives

By the end of this talk, participants will be able to:

1. Understand how mathematical concepts from differential geometry are used to study shapes and structures in medicine.
2. Recognize the role of computational techniques in analyzing medical images and anatomical changes.
3. Identify real-world applications of differential geometry in diagnosing diseases and planning surgeries.
4. Appreciate how technology and mathematics come together to improve healthcare outcomes.
5. Discuss the future potential of advanced computing and artificial intelligence in medical research and treatment.



### Dr. Mohamed Hefny

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Please email [emmabrown1@ohri.ca](mailto:emmabrown1@ohri.ca) if you would like to be added to the HAD MS Teams group / mailing list.

Inspired by research.    Inspiré par la recherche.  
Driven by compassion.    Guidé par la compassion.