VIPICS: **V**isualizing and **I**nteracting with **P**aths in **C**onfiguration **S**paces

Mathematics Computing Lab

Spring 2019 project

- **Project supervisor:** Jānis Lazovskis, SEO 522
  Website: github.com/jlazovskis/vipics
  Email: jlazov2@uic.edu

- **Checklist.** By the end of February, you should have a basic understanding of the following:

  - how to use `git` and GitHub
  - how to code in C#
  - how to use Unity with the Oculus headset
  - algebraic topology at the undergraduate level

- **Goals.** By the end of February, we will:

  - understand what we want to do

  By the end of March, we will:

  - achieve primary goal
  - define secondary goal based on primary goal

  By the end of April, we will:

  - achieve secondary goal
  - create poster describing the semester's work

- **Sources.** Read these papers:

  - Carlsson (2009). *Topology and data.* (Sections 2.1, 2.3)
  - Topaz, Ziegelmeier, Halverson (2015). *Topological Data Analysis of Biological Aggregation Models.*