

STUDY ABROAD SUMMER 2019

PATHS OF DEVELOPMENT IN MATHEMATICS AND PHYSICS AT THE TIME OF **FRENCH REVOLUTION** *MATH 395 or PHYS 395*



When the French Academy of Sciences was shut down by the Revolutionary Convention in 1793, only a few scientists survived, one of whom was Joseph-Louis Lagrange. Together with Euler, Lagrange developed a new calculus, called variational calculus, which not only opened the door for new physics, but it permitted the reformulation of existing theory, such as Newtonian mechanics, in a more elegant manner. Fourier laid the foundations for an extremely rich area of research in mathematics that carries his name, Fourier Analysis. In this seminar, we will follow the paths in the history of mathematics leading to the development of variational calculus, differential equations, and approximation theory based on works of D'Alembert, Euler, Fourier, Lagrange, and Laplace. We will start the course at CNU, continue it in Paris, and complete it in Great Britain, first in Edinburgh and then in Cambridge.



Travel Dates: mid - June to early - July 2019

Projected Cost: \$4000 plus tuition and personal expenses

Credit: 3 hours in MATH or PHYS

Information Meeting: September 18 @ 7:30 pm, DSU Harrison Room

If you are thinking about joining us, please see Dr. Dobrescu or Dr. Heddle or email mihaela.dobrescu@cnu.edu or david.heddle@cnu.edu.

