NEW YORK TECH

APPLIED AND COMPUTATIONAL MATHEMATICS EVENING

7:00-8:30 PM, THURSDAY, JANUARY 28, 2021

ZOOM LINK   https://nyit.zoom.us/j/93023960054

Featuring exciting talks by our faculty based on our current courses
Followed by a panel discussion and Q & A with our faculty and student researchers

The mathematics of medical imaging, with Dr. Vitaly Katsnelson

Can mathematics help save lives? In the last 25 years there has been a revolution in image reconstruction techniques especially in medical imaging where one tries to detect tumors and other anomalies inside the body noninvasively. Medical imaging works due to accurate measuring techniques, sophisticated computers, but most importantly, powerful mathematics. In this talk, I will show how mathematics is vital for medical imaging techniques such as a CT-scan and an MRI.

How numerical methods help us simulate reality, with Dr. Eduardo Corona

If you want to design a self-driving car, find the next smart nano-material or build the engine behind a free-world videogame, you need one thing: to be able to simulate the real world: the physics, chemistry and behavior of all sorts of materials. I will use examples from our Numerical Methods class, from my student Samantha Rivera's and my own's research to show you how you can learn to do this with the skills in our Applied and Computational Math major.

From meteorites and droplets to filtration and land degradation, with Dr. Pejman Sanaei

The muscles of mathematics are connected to the bones of science by the tendons of mathematical modeling. Students will get a glimpse of models for the real-world systems and in their daily life such as membrane filters in vacuum cleaners, stability flight of meteorites, and erosion in nature. The goal is to grasp the role of the key components in the models and make predictions on improving the systems' performance.

Panel discussion: What is it like to study applied math as a major or a minor? What courses can I take, and what can I specialize in? What does a career in math look like? What opportunities in industry, government and academia will open up, and what are my earnings possibilities? Come ask our faculty members and student researchers these and any other questions!

To find out more about NYIT's Mathematics Major, click here to view our video.