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UNDERGRADUATE TALK

presented by

The **UO Chapter** of the **Association for Women in Mathematics**

Newton to Einstein: A guided tour through space and time

3:30 PM Tuesday
January 16th
Deady 208

The cosmos and its laws have fascinated people since the ancient times. Many scientists and philosophers have tried to describe and explain what they saw in the sky. And almost all of them have used mathematics to formulate their ideas and compute predictions for the future. Today, we have made huge progress in understanding and predicting how planets, stars, and galaxies behave. But still, the mysteries of our universe are formulated and resolved in mathematical language and always with new mathematical methods and ideas.

In this lecture, you will hear about two of the most famous physicists of all times, Isaac Newton (1643-1727) and Albert Einstein (1879-1955), and about their theories of the universe. You will learn about common features and central differences in their viewpoints and in the mathematics they used to formulate their theories. In passing, you will also encounter the famous mathematician Carl Friedrich Gauss (1777-1855) and his beautiful ideas about curvature.

