NSYSU physics 書報討論

Weekly Seminar

Probing Gas around Galaxies across Cosmic Time

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14:10-15:00 Thu-5/Nov/2026, at 地址: PH2006

Abstract

Galaxies are not isolated islands of stars. Each one is surrounded by a vast, nearly invisible halo of gas, known as the circumgalactic medium. This gas is a galaxy's fuel supply for making new stars, and it is also where galaxies dump material blown out by exploding stars and black holes. But how can we study gas we can barely see?

In this talk, I will show how we use the light of distant, bright objects called quasars as cosmic flashlights. As their light passes through the gas around a galaxy, the gas leaves a fingerprint in the light. Using data from the Dark Energy Spectroscopic Instrument (DESI), which has measured the light of millions of galaxies and quasars, I will share what we are learning about the nature of the gas around galaxies and what this tells us about how galaxies grow and change over cosmic time.

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