

NSYSU

# physics 書報討論 Weekly Seminar

## Recent development in Weak gravitational lensing

Toshifumi Futamase

Astronomical Institute, Graduate School of Science, Tohoku University  
URL: <https://www.astr.tohoku.ac.jp/~t-okamura/cosmo/people.html>

URL QR



14:10-15:00 Thu-5/Dec/2024, at PH2006

### Abstract

Dark matter and dark energy play essential roles in the structure formation of the universe, but their true nature remains unknown. Weak gravitational lensing is an important tool for investigating their properties, and has revealed a great deal so far. Furthermore, with the development of observational instruments such as JWST and Euclid, even more will likely be revealed. However, more advanced analysis methods are needed to fully understand the value of the data from the new observational instruments. In the lecture, after a brief introduction to weak gravitational lensing and the results of observations to date, then we discuss recent progress in analytical methods and future prospects.

