

Seminarium Astrofizyczne

wtorek 11.04.2023 godz. **15:00**
ul. Pasteura 7; sala 404

transmitted also on line

<https://www.gotomeet.me/NCBJmeetings/seminarium-astrofizyczne>

Password: AstroSemi

Michał Michałowski

(Astronomical Observatory Institute, Adam Mickiewicz University, Poznan, Poland)

The fate of the interstellar medium in early-type galaxies

The way galaxies stop forming new stars is a key aspect of galaxy evolution. This is connected with removal of gas, the fuel of star formation. I will present a novel way to study the interstellar medium (ISM) removal by selecting dusty early-type galaxies detected by Herschel, for which the decrease of gas and dust can be tracked as a function of age. The observations of their dust, molecular and atomic gas content led to the first direct measurement of the ISM removal timescale and to the conclusion that the cold ISM is likely removed by feedback from old stellar populations (either by planetary nebulae or cosmic rays). This feedback is often not considered in the context of quenching of star formation. Low star formation efficiencies (SFE) and normal gas fractions indicate that quenching is not due to running out of gas, but due to gas becoming unable to form stars.

Serdecznie zapraszam,

Agnieszka Majczyna