

Seminarium Astrofizyczne
wtorek 03.12.2019 godz. 12:30
ul. Pasteura 7, sala 404

Wojciech Hellwing
(Center for Theoretical Physics of the Polish Academy of Sciences)

2019 Nobel prize in Physics: Cosmology

Half of this year Nobel prize in physics was awarded to Prof. Jim Peebles (IAS Princeton) "for contributions to our understanding of the evolution of the universe and Earth's place in the cosmos". The particular emphasis for the Prof. Peebles' half of the prize was: "or theoretical discoveries in physical cosmology". In my talk I shall describe and discuss seminal contributions to the field made by Jim Peebles over the years of his career. His achievements and contributions lead to consequential build-up of a theoretical tool-box which enabled us to connect observations of the Universe and its large-scale structure with the physical theory describing its constituents and properties. These in turn led to emergence of a new field of science: the physical cosmology. I can say without an exaggeration that Prof. Jim Peebles can be regarded as one of the founding fathers of modern cosmology. I will clearly demonstrate a convincing evidence supporting such statement by discussing the most important of his many contributions, including: theory of the primordial fireball and the residual cosmic background radiation, theory of galaxy formation and growth of large-scale structure, models of dark matter and dark energy.

Serdecznie zapraszam,
Agnieszka Majczyna