## Siam Physics Congress 2017



Contribution ID: 39

Type: Poster

## A Study of Star Formation by $H\alpha$ Emission of Galaxies in the Galaxy Group NGC 4213

Thursday 25 May 2017 17:45 (15 minutes)

This research aims to study hydrogen alpha emission, corresponding to star formation of galaxies in the NGC 4213 group that has an average recession velocity of 6,821 km/s. The imaging observations with broadband filters (B, V and  $R_C$ ) and narrow-band filters ([S II] and Red-continuum) were carried out from the 2.4-m reflecting telescope at Thai National Observatory (TNO). There are 11 sample galaxies in this study, consisting of 3 elliptical, 1 lenticular and 7 spiral galaxies. It was found that the late-type galaxies tend to be bluer than early-type galaxies, due to these galaxies consist of relatively high proportion of blue stars. Furthermore, the equivalent width of hydrogen alpha (EW(H $\alpha$ )) tends to increase as a function of morphological type. This indicates that star formation in late-type galaxies taking place more than the early-type galaxies. Furthermore, a ratio of the star formation rate to galaxy mass also increases slightly with the galaxy type. This could be due to the interaction between galaxy-galaxy or tidal interaction occurring within the galaxy group.

Author: MAUNGKORN, Sakdawoot

**Co-author:** Dr KRIWATTANAWONG, Wichean (Department of Physics and Materials Science, Faculty of Science, Chiang Mai University, Chiang Mai, Thailand)

Presenter: MAUNGKORN, Sakdawoot

Session Classification: Poster Presentation II

Track Classification: Astronomy, Astrophysics, and Cosmology