Siam Physics Congress 2022 (SPC2022)



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Type: Oral

Discovery of tsunami-like pulsation waves in the very fast rotating A-type stars

Friday 24 June 2022 14:00 (15 minutes)

I will present the first result of our project on the search for high-degree nonradial pulsations in the very fast rotating bright A-f stars.

These pulsations look like the tsunami waves running over the stellar equator to the direction of rotation (prograde waves).

To search for the pulsating candidates, we used the photometric data from the NASA space telescope TESS and the high- and medium-resolution spectroscopy obtained with 2m class telescopes located in Europe and with the Thai National Telescope.

For all candidate stars, we discovered prograde waves having very large amplitude on the surface. We discussed the identification of the spatial structure of these oscillations.

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