Report of the RCNP Collaboration Research Network (RCNP-CORENet)

1 Title of research:

Study of a condensation in 20Ne within the THSR wave function

2 List of participants:

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3 Period of research:

09/2019~03/2021

4 Main location of collaboration implementation:

RCNP, Osaka University

5 Publication list:

No publications and talks.

6 Description of the results and outputs

By using the constructed microscopic cluster wave functions (the THSR wave function) and three-body interactions, we have got some preliminary results for the $5\,\alpha$ calculations. The most difficult and important part has been done. Next, we will perform GCM calculations and search for the $5\,\alpha$ condensate state in 20 Ne.