**Individual External Collaborator Participation to a Paper**

eROSITA\_DE Sponsoring Member: Pengfei Li

Institute: AIP

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Title of paper: Exploring the radial acceleration relation in galaxy clusters with eROSITA

Number of eROPUB approved project: 1 (to be approved)

**IEC participation paper request for** (add lines if necessary):

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| Name Surname | Affiliation | Email address |
| Yong Tian | National Central University (Taiwan) | yongtian@astro.ncu.edu.tw |
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**Short description of contribution for XXX** (to be completed for each IEC requesting co-authorship)

Yong Tian is an expert in dynamical studies of galaxy clusters. He has used the kinematics of member galaxies to study the dynamics with galaxy clusters (e.g. Tian et al. 2021, ApJ). He has experience in collecting the data of member galaxies from SDSS for clusters. He is also developing some formula relating kinematics to gravitational potential (private contact). As such, while I aim to obtain the X-ray profile for some galaxy clusters from eROSITA, Tian can collect data for member galaxies, so that we can study the dynamics of galaxy clusters with two independent methods.

Tian et al. (2020, ApJ) established a tight correlation between baryonic acceleration and total acceleration in galaxy clusters with the cluster sample from CLASH. We would like to compare our results to his relation. Therefore, including Tian in my project will be very helpful.