**Job Description for Postdoctoral Fellow in 2024 (P2)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Group of Recruitment | | Space Science Division  Space Astronomy Group | Supervisor | Bomee Lee |
| Area of Recruitment | | Observational Astronomy/ Observational Cosmology | Number of Recruitment | 1 position |
| Purpose of Recruitment | | * Research on weak gravitational lensing with near-infrared data * Study of galaxy evolution at z > 1 with Hubble and Euclid space telescope | | |
| Project | Type of Project | National Research Foundation of Korea grant funded by the  Korea government(MSIT) | | |
| Project Name | Study of the dark matter distribution in the z > 1 Universe with infrared weak lensing | | |
| Duration of Project | 2022/03/01 – 2028/08/31 | | |
| Beginning Date | 2024/05/01 (starting date is negotiable) | | |
| Project Abstract | We first build the WL catalog using HST/WFC3 data with the international collaborators (called NIRWL) to complete our understanding of galaxy evolution and cosmological models at z >1. | | |
| Details | Key Duties | * Participating in the near-infrared weak gravitational lensing (NIRWL) project * Independent science study in galaxy evolution and cosmology with HST and Euclid near-infrared data | | |
| Details of Duties | * Constructing weak lensing map with HST/WFC3 data and measuring photometric redshifts of galaxies with state-of-the-art methods for science * Frequent travels to Caltech for collaboration meetings | | |
| Knowledge & Skills  Required | * Experience in astronomical instrumentation, optical and IR observation, or multi-wavelength data set is preferred. | | |
| Attitude | Communicative with international team members. | | |
| Basic Ability | | Astronomical tools like Python, github, etc. | | |
| Contact | | Bomee Lee ([bomee@kasi.re.kr](mailto:bomee@kasi.re.kr)) | | |
| 25 January 2024  Supervisor: Bomee Lee Director: Jaejin Lee | | | | |