Investigating the morphology of astronomical objects using computer generated frame technique

Supervisor: Yasuhiro Hashimoto (NTNU)

Project Summary:

One of the outstanding feature of the high quality data taken by the modern astronomical telescopes, such as ALMA, is its high spatial resolution. This high spatial resolution, among others, enables us the analyses of various astronomical objects in detail. Characterizing the morphology of these astronomical objects, such as galaxies or cluster of galaxies provides us with a powerful tool to understand the formation and evolution of galaxies. We propose to explore and develop the scheme to characterize and analyze the morphology of astronomical objects, starting from galaxies by extending and applying the Key frame technique.

Qualifications/Preferences:

- *Strong computer skill is absolutely necessary, while the background in Astronomy is not required.
- *Extensive experience in C programming is absolutely required (no excel, no Photoshop, no IDL please)
- *Strong background and interests in the field of generic image processing is preferred
- *Deep understanding of the key frame and 'tweening' technique is essential
- *Experience in Linux is preferred.
- *Good communication skills in English is required
- *Prefer junior students