

X05b

## **ALMA Observation of the IR-bright Merger VV114**

齊藤俊貴, 舘内 謙, 本原顕太郎 (東京大学), 伊王野大介, 今西昌俊, 川邊良平, 菅井肇, 中西康一郎, 萩原 喜昭, Daniel Espada(国立天文台), Min Yun(UMass)

The importance of galaxy mergers in the context of galaxy formation and evolution have been clearly demonstrated in various numerical simulations. The violent merger event not only results in large scale morphological transformation and mass accumulation, but it also triggers gas compression, turbulence, and gas inflow to the galactic center region. While our theoretical understanding has advanced significantly over the past few decades, observational studies have been hampered by the limit in sensitivity and resolution of the existing instruments. Here, we present preliminary cycle 0 ALMA observations of an IR-bright late stage merger VV114. We will discuss the distribution and kinematics of molecular gas, and compare them with optical/IR images obtained at HST/Spitzer and other ground based telescopes.