

## **ABSTRACT**

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### **The ALMA Impact on Galaxy Formation and Evolution**

Deep Herschel surveys are dramatically improving our understanding of star formation in the early Universe by providing accurate star formation rates, SEDs, dust properties, and number counts of star forming galaxies in the peak epoch of galaxy formation. Follow-up studies with ALMA will enable us to study the physics of star formation in these young systems. I will discuss the roles of galaxy merging, gas accretion, and secular evolution in galaxy formation from the ALMA perspective. In particular, I will discuss how high resolution observations with ALMA of the cold gas and dust in nascent galaxies will shed light on several important questions:

- 1) What fraction of star formation is due to major mergers vs minor mergers and steady accretion?
- 2) How do galaxies get their gas? What are gas fractions in galaxies as a function of mass, redshift, and environment?
- 3) What drives the internal evolution in high-z star forming galaxies?
- 4) How important is feedback?