



Marcelo Alvarez

Research Scientist

Kavli Institute for Particle Astrophysics and Cosmology

Bio

BIO

Scientist at the Kavli Institute for Particle Astrophysics and Cosmology addressing questions in cosmology by developing algorithms and software to process, analyze and simulate data from observations of the sky. Member of the Marlowe team affiliated with Stanford Data Science and Human-Centered Artificial Intelligence.

Education and previous appointments: PhD from UT Austin; Stanford; CITA; Berkeley; LBNL

ACADEMIC APPOINTMENTS

- Research Engineer, Kavli Institute for Particle Astrophysics and Cosmology

Publications

PUBLICATIONS

- **Quasar HII regions during cosmic reionization** *Monthly Notices of the Royal Astronomical Society*
Tom Abel, Marcelo Alvarez
2008; 380 (654): 30
- **Accretion onto the First Stellar Mass Black Holes** *Astrophysical Journal Letters, submitted*
John Wise, Tom Abel, Marcelo Alvarez
2008
- **Implications of WMAP 3 Year Data for the Sources of Reionization** *Astrophysical Journal Letters*
Paul Shapiro, Kyungjin Ahn, Ilian Iliev, Marcelo Alvarez
2006; 644 (2): 101
- **The Cosmic Reionization History as Revealed by the Cosmic Microwave Background Doppler-21 cm Correlation** *Astrophysical Journal*
Eiichiro Komatsu, Olivier Dore, Paul Shapiro, Marcelo Alvarez
2006; 647 (2): 840
- **The H II Region of the First Star** *Astrophysical Journal*
Volker Bromm, Paul Shapiro, Marcelo Alvarez
2006; 639 (2): 621
- **The Contribution of Star Formation and Merging to Stellar Mass Buildup in Galaxies** *Astrophysical Journal*
Marcelo Alvarez, Niv Drory
2008; 680 (1): 41
- **Signature of patchy reionization in the polarization anisotropy of the CMB** *Physical Review D*

Gil Holder, Ilian Iliev, Garrelt Mellema, Ue-Li Pen, Paul Shapiro, Olivier Dore
2007; 76 (4): 043002