

Scientific Highlights of IAUS345:

IAUS 345 contained review talks and research contributions related to the formation of the Sun, Earth, and early life. Interesting topics where much new research is taking place include: (1) the formation of low mass stars in tiny fibers inside larger filaments; (2) the likely formation site for the Sun, considering short-lived radionuclides in young meteorites, which point to contamination by nearby massive stars; (3) environmental influences of nearby stars in dense clusters; (4) observations of proto-planetary disks around young stars and their chemical and dust structures; (5) possible formation mechanisms for planetesimals and the early Earth; (6) origin of the Earth's water and atmosphere; (7) the influence of stellar activity on young Earths and potential early life; (9) observational signatures of life-like processes on exo-planets; and (8) life as a Physico-Chemical system.