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On Tuesday, March 11, Noon - 1:00 p.m., Section 367 will present "E Pluribus Unum: Future World of Mutable, Cellular Sciencecraft" featuring Dr. Tom Yunck of the Exploration Systems Autonomy Section, in the 180-101 Conference Room.

The digital revolution is invading our lives in dramatic ways: broadband wireless, wrist phones, slipcase super-computers. As yet, the evolutionary world of flight projects has barely tapped the possibilities. Here we present an approach to Earth sensing with large arrays of tiny, free-flying cells. Each cell is an autonomous sensor collecting data that may itself be of direct interest. More generally, data from multiple cells - dozens, hundreds, thousands - can be fused in diverse ways to realize the functions and observing power of many larger (perhaps impractical) spacecraft at once. At any moment a sizable fraction can be off line with little effect on overall performance. System properties will include fire-and-forget autonomy; uniformly low costs; failsafe reliability; and unblinking global coverage. These concepts will be buttressed with results from pathbreaking missions over the past decade.

This lecture is sponsored by the Exploration Systems Autonomy Section.
