

PROSPECTS FOR COSMIC DUST EXPERIMENTS ON THE PLANNED REFLIGHT
OF LDEF

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ABSTRACT

The Long Duration Exposure Facility (LDEF-I), which contains a number of cosmic dust experiments, is due to be launched in the spring of 1984 and recovered about a year later. Current plans call for re-fitting the LDEF spacecraft with a large area of plastic nuclear track detectors and relaunching (LDEF-II) for a flight that will last about 2 years. The main purpose of the mission is to extend primary cosmic ray abundance measurements to the actinide region. A meeting was held at Washington University in December 1983 to discuss the problems and prospects for cosmic dust experiments on LDEF-II. Most participants were drawn from the LDEF-I community of investigators. The meeting resulted in a report which treated the scientific rationale for LDEF-II dust experiments, discussed various implementation options, and concluded with a set of summary recommendations. We discussed this report and summarized the status of LDEF-II as of this meeting. It is important to note that the report serves equally well as a basis for discussion of dust experiments on future space stations.