

## Full-sky Astrometric Mapping Explorer (FAME)

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The FAME project began Phase B development in September 2000. FAME is a MIDEX class NASA Explorer mission that will perform an all-sky, astrometric survey with unprecedented accuracy. FAME will produce an astrometric catalog of 40 million stars between 5th and 15th magnitude. For the bright stars (5th to 9th magnitude) FAME will determine positions and parallaxes accurate to better than 50 microarcseconds, with proper motion errors less than 50 microarcseconds per year. For the fainter stars (between 9th and 15th magnitude) FAME will determine positions and parallaxes accurate to better than 500 microarcseconds, with proper motion errors less than 500 microarcseconds per year. FAME will also collect photometric data on these 40 million stars in four Sloan DSS colors.

The FAME science, instrument, and spacecraft requirements and error budgets are being refined to establish the basis for the improved design of the instrument and spacecraft. The Attitude Control System (ACS) based on solar radiation pressure is being studied, including the limitations on the solar angle between the Sun and the rotation angle. The data processing plans are being developed. The CCD procurement contract is in place and design and fabrication of the CCDs is in progress. CCD tests for operations in various Time Delay Integration (TDI) situations are underway and described in another poster. It appears that the current FAME launch schedule will be delayed somewhat due to recent NASA budget restrictions.

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