

FIELD EMISSION ELECTRIC PROPULSION (FEEP)

- FEEP is an electrostatic propulsion based on field ionisation of a liquid metal (usually Cesium) and acceleration of the ions by a strong electric field
- FEEP has unique features, ideal for drag-free control applications:
 - thrust range 1 μN to 1 mN
 - near instantaneous switch on / switch off capability
 - high resolution throttleability (better than 1 part in 10^4)
 - accurate thrust modulation in both continuous and pulsed modes
- Because of the high Isp (4000 to 10,000 s), propellant flow rate is very low and the propellant reservoir is integrated with the thruster
- FEEP thrusters are developed by CENTROSPAZIO and the power control electronics by LABEN

