

Radiative Heat Transfer applied to Thermal Control of Satellites

Location :	ISAE-ENSMA
Objectives :	The purpose of this course is to simulate and control thermal behavior of satellite during its life
Prerequisites :	Basis of conductive and radiative heat transfer
Contents :	Generalities on radiative heat transfer, Monte-Carlo simulation, instationary heat transfer from nodal description, orbital description, thermal control strategies by using heat pipes.
Duration :	1 session of 3 hours (class) + 2 sessions of 3 hours (lab works) + 4-hour Small Sat Workshop + conference from Airbus Defense and Space
Professors :	Gildas Lalizel
Bibliography :	Spacecraft Techniques and Technology, CNES, CEPADUES EDITIONS.
Evaluation :	Quiz on the Cubsat thermal simulation lab works