Name-Surname	Charalambos Sinnis
Thesis Title	*Stability analysis of astrophysical magnetized jets without current sheets*
Supervisor	N. Vlahakis, Associate Professor
Summary	The thesis analyzes and examines the stability properties of astrophysical magnetized jets without current sheets. The introduction presents basic properties of astrophysical jets. In the second chapter the subjects of the unpurturbed cylindrical magnetic field structures, the linearization of the ideal magnetohydrodynamic equations, the properties of the jet's environment, the boundary conditions on the jet's surface and the relativistic expansion of the above concepts are presented. The results of the numerical integrations including a parametric study are extensively presented in the third chapter. In the final chapter a full summary of the results of this thesis is presented, followed by a discussion on the open questions and future challenges on the subject of stability analysis of relativistic magnetized jets.
Key words	magnetohydrodynamics (MHD), galaxies: jets, instabilities, plasmas, methods: analytical
Evaluation committee	N. Vlahakis, Associate Professor K. Tsinganos, Professor I. Daglis, Professor