Application for a:	Outgoing Scheme NEWFELPRO Fellowship for experienced researcher
Proposal Acronym:	NCGGBH
Proposal Title:	Noncommutative geometry, gravity and black holes
Research area(s):	Physics PHY
Research sub-disciplines:	-Fundamental interactions and fields -Relativity -Mathematical physics
Category of research:	basic
Duration in months:	16
Keywords:	Noncommutative field theory, Hopf algebra, kappa-Minkowski spacetime, Snyder space, black hole entropy, quasinormal modes, deformation of special relativity and twisted statistics
Abstract:	The plan of the project is to investigate various aspects of noncommutativity, particularly of kappa-Minkowski and Snyder type. The aim is to construct Klein-Gordon and Dirac operators on the curved background of certain black hole geometries in the noncommutative setting and to investigate the properties of the bosons and fermions on such backgrounds, as well as to calculate the thermodynamical properties of noncommutative black holes in question. In the particular case of NC BTZ, AdS/CFT correspondence will be investigated.
Does this proposal possess any of the sensitive ethical issues detailed in ethical issues table?	No