

Proposal Acronym	MiLDeFA
Proposal Title:	Micro-local defect functionals and applications
Surname:	Mitrović
First name(s):	Darko
Research area:	Mathematics MAT
Sub-discipline of research area:	Partial differential equations
Category of research:	basic
[REDACTED]	[REDACTED]
Abstract:	<p>H-measures and H-distributions or micro-local defect functionals are functionals which we adjoin to weakly convergent sequences in spaces of integrable functions. If the functionals are zero then the corresponding sequences converge also strongly. One of usual situations in proving existence of solutions to non-linear equations is the question (of loss) of strong convergence of weakly converging sequences. If the strong convergence holds, then the limit will represent a solution to the considered equation. Therefore, the micro-local defect functionals appeared to be powerful tools for analysis of partial differential equations. In the frame of the project, we shall focus ourselves on the following three problems: 1. Development of H-measures and H-distributions adapted analysis of PDEs that change type. 2. Optimization of the topology on the space on which we can define H-distributions. 3. The propagation property for H-distributions.</p>
Does this proposal possess any of the sensitive ethical issues detailed in ethical issues table?:	No