



ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ
ΣΧΟΛΗ ΘΕΤΙΚΩΝ ΕΠΙΣΤΗΜΩΝ
ΤΜΗΜΑ ΜΑΘΗΜΑΤΙΚΩΝ
ΤΟΜΕΑΣ ΓΕΩΜΕΤΡΙΑΣ

Σ Ε Μ Ι Ν Α Ρ Ι Ο Γ Ε Ω Μ Ε Τ Ρ Ι Α Σ

Παρασκευή, 26 Ιανουαρίου 2018, ώρα 12:15

Ομιλήτρια: Μαγδαληνή Φλάρη (University of Sheffield)

Τίτλος: On warps and grids for double and triple vector bundles

Η ομιλία θα δοθεί (στα Ελληνικά) στην αίθουσα M2 του 3^{ου} ορόφου του κτιρίου της Σχολής Θετικών Επιστημών. Παρακαλείσθε να παρευρεθείτε

Περίληψη

Grids are a natural extension of the notion of section to double vector bundles. A grid consists of a pair of linear sections, and constitutes two non-commuting paths from the base manifold to the total space; the warp, which is a section of the core, measures the lack of commutativity.

Well-known geometric objects can be expressed as warps: for example, the bracket of two vector fields is a warp, and, given a connection in a vector bundle, the covariant derivative of a section along a vector field is a warp. In triple vector bundles, analysis of the six paths from the base manifold to the total space leads to identities among the warps of the constituent double vector bundles.

In this talk we will outline a general result for a grid in a triple vector bundle and its significance for grids in iterated tangent and cotangent bundles.

This is joint work with Prof. Kirill Mackenzie.