



**ΕΘΝΙΚΟ ΚΑΙ ΚΑΠΟΔΙΣΤΡΙΑΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ**  
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Αθήνα, 30 Απριλίου 2007

### **Ομιλία Γενικού Σεμιναρίου**

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**Τίτλος :** " The Recognition Problem for Topological Manifolds "

**Ημερομηνία:** Πέμπτη 3 Μαΐου 2007, ώρα **12:00**

**Τόπος:** Αίθουσα **Γ32**, Τμήμα Μαθηματικών

#### **Abstract:**

We shall present a historical survey of the geometric topology of *generalized manifolds*, i.e. ENR homology manifolds, from their early beginnings in 1930's to the present day, concentrating on those geometric properties of these spaces which are particular for dimensions 3 and 4, in comparison with generalized  $n > 4$ -manifolds.

In the second part of the talk we shall present the current state of the main two problems concerning this class of spaces - the *Resolution problem* (the work of Bestvina-Daverman-Venema-Walsh, Bryant-Lacher, Brin-McMillan, Lacher-Repovš, Thickstun, and others) and the *General position problem* (the work of Bing, Brahm, Lambert-Sher, Daverman-Eaton, Lacher-Repovš, Daverman-Thickstun, Daverman-Repovš, Brahm, and others). We shall list open problems and related conjectures.