

# Seminario de Geometría y Topología



## **Unconditional series in topological groups**

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### **Resumen:**

We plan to discuss an example of an infinite complete connected topological Abelian group without non-trivial convergent sequences, thus disproving the claim in [N.~Bourbaki, General Topology, Part~1, Herman, Paris VI (1966), Ex.~6(b)]. We also show that if every convergent series in a  $\mathcal{C}$ -complete topological Abelian group converges unconditionally, then the group has a local base at the neutral element consisting of open subgroups. This result corrects Bourbaki's claim.

**Lugar: Universidad Complutense de Madrid**  
**Facultad de Ciencias Matemáticas**  
**Departamento de Geometría y Topología, Sala 225**  
**Fecha y Hora: Martes, 13 de septiembre de 2016, 12:00**  
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