青年学术论坛邀请报告

## 报告人： 肖维 博士

## 单位：深圳大学

## 时间：9月13日（周 三） 13:30--14:30

## 邀请人： 罗栗

## 地点：闵行数学楼126室

## 题目： Dirac cohomology and Euler-Poincare pairing for weight modules

## 摘要: Let g be a reductive Lie algebra over C. For any simple weight module of g, we show that its Dirac cohomology is vanished unless it is a highest weight module. This completes the calculation of Dirac cohomology for simple weight modules since the Dirac cohomology of simple highest weight modules was carried out in our previous work. We also show that the Dirac index pairing of two simple weight modules agrees with their Euler-Poincare pairing. The analogue of this result for Harish-Chandra modules is a consequence of the Kazhdan's orthogonality conjecture which was proved by Jinsong Huang and Binyong Sun.

## 个人简介：深圳大学数学与统计学院讲师。本科毕业于清华大学数学系，后师从黄劲松教授，于香港科技大学获得数学博士学位。研究方向为李理论。