

# **An index theorem for $\mathbb{Z}/2$ harmonic spinors**

**Andryi Haydys**

Brussels

Multi-valued functions or sections appear in various areas of geometry and analysis, for example in the theory of minimal surfaces and in gauge theory. In this talk, I shall discuss mostly 2-valued harmonic spinors, in particular an index theorem for such objects in the setting where the branching locus is allowed to be singular. This is a joint project with R. Mazzeo and R. Takahashi.