

**SPEZIELLE ZEITFUNKTIONEN UND ISOMETRISCHE
EINBETTUNGEN VON
LORENTZ-MANNIGFALTIGKEITEN**

OLAF MÜLLER (UNIVERSITÄT REGENSBURG)

In this talk, new existence results concerning time functions with additional properties on a globally hyperbolic manifold will be presented. These properties are certain bounds on geometric quantities as lapse and shift. The results are linked to completeness properties and the existence of closed isometric embeddings in Minkowski spaces.