



**J.J. Grobler** (srsjg@puk.ac.za) Unit for Business Mathematics and Informatics, North West University (Potchefstroom Campus), North West Province, South Africa, *Doob's optional sampling theorem in Riesz space*.

ABSTRACT.

Dedicated to WAJ Luxemburg on occasion of his 80th birthday.

The notions of stopping times and stopped processes for continuous stochastic processes in Riesz spaces are defined and their properties studied. We introduce a stopping time in this abstract setting as an orthomorphism on a Riesz space and show that Doob's optional sampling theorem can be formulated and proved.