## 1056-42-854 **Peter Casazza** and **Gitta Kutyniok\*** (kutyniok@uni-osnabrueck.de), Institute for Mathematics, University of Osnabrueck, 49069 Osnabrueck, Germany. A Quantitative Notion of Redundancy.

The notion of redundancy is at the heart of frame theory. However, in the case of finite frames, no quantitative notion has been established yet. In this talk, we first introduce and discuss a list of desiderata a rationally defined quantitative notion of redundancy for a finite frame shall satisfy. We then propose a notion of upper and lower redundancy which, in particular, satisfies all properties advocated in the desiderata. (Received September 18, 2009)