



FROM VISION TO DECISION



## SEMINAR FRIDAY 25.04.2014

**PLACE:** MedViz Facilities., Møllendalsbakken 7, 5<sup>th</sup> floor

**TIME** : 12:00-13:00

### SPEAKERS/TITLES

**MR-physicist Erling Andersen,**

Haukeland University Hospital, Dept of Clinical Engineering, and Dept of Radiology

**Title:** T1 quantification in phantom and healthy kidney

**Professor Alexander Malyshev,** Department of Mathematics, University of Bergen

**Title:** On the tracer-kinetic theory for perfusion estimation



### ABSTRACT

#### Andersen

Tissue relaxation time  $T_1$  is a tissue property which is useful for the differentiation and characterization of tissue. It is also the mechanism of tissue enhancement in  $T_1$ -weighted contrast-enhanced MRI exams. We will discuss the analysis and quantification methods, and implications for the data acquisition.

#### Malyshev

In this talk I will discuss some mathematical formulas useful for estimation of tissue parameters from the time curves of indicator concentration over whole organs. The theory will be illustrated by some computed examples