A brief introduction to Computable Analysis

DANIEL GRAÇA

Dep. de Matemática, FCT – Universidade do Algarve
SQIG - Instituto de Telecomunicações

There is a well established computability theory for dealing with natural numbers. However computation is often performed over real numbers or with real functions. Computable Analysis provides a computability theory which can be used for real numbers, real functions, or subsets of real numbers and higher type operators over the real numbers. In this talk we will digress through some basic definitions and results of Computable Analysis.