JOHANNES CHRISTENSEN, KU Leuven

A new approach to describing KMS states on C^*-algebras.

Studying KMS states for C^*-dynamical systems is a popular theme in the Operator Algebra community in these years. This is in part motivated by the natural interpretation of KMS states in models in physics and in part because KMS states is a powerful tool for building bridges between seemingly unrelated areas of mathematics and uncovering interesting structural properties of C^*-dynamical systems.

In this talk I will present a new approach to describing KMS states for C^*-dynamical systems that admit a certain kind of nicely behaved subalgebra of the fixed-point algebra. I will then explain how this description of KMS states provides a new interpretation of a celebrated theorem by Sergey Neshveyev, and how it relates to recent results of Ursu on traces on crossed products.

The results I will present in this talk is joint work with Klaus Thomsen.