Robert Oeckl, UNAM Morelia, México Title: alpha-Kähler quantization

Quantization of field theory in curved spacetime depends on a choice of vacuum. This choice can be seen as equivalent to a choice of positive-definite Kähler polarization on the space of germs of solutions on the hypersurface. When the hypersurface is not spacelike, the polarization encoding the physical vacuum is in general not Kähler and the standard quantization prescription fails. I shall discuss how this problem emerged and show a way how it can be solved in the wider context of general boundary quantum field theory.