

# The timelike tube theorem and analytic vectors in QFT

*jeudi 11 avril 2024 09:15 (55 minutes)*

The Bros-Iagolnitzer analysis of analytic singularities in QFT can be generalised to analytic curved spacetimes via the notion of the analytic wavefront set and the analytic microsupport. I will start with an elementary introduction into the topic and basic definitions. I will give some physics intuition that motivates the introduction of analytic states and will show that one can prove the timelike tube theorem in quantum field theory on curved spacetimes under plausible assumptions. I will also discuss some modified notions of analytic singularities that capture the structure of the  $n$ -point functions at infinity.

(Joint work with E. Witten)

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