## SEMINARIO DEPARTAMENTO de MATEMÁTICA

UNIVERSIDAD TÉCNICA FEDERICO SANTA MARÍA

JUEVES 3 de Abril de 2014, 11.30 am

Sala de Seminarios, Edificio F, UTFSM

## HYPOTHESIS TESTING FOR STATIONARY ERGODIC TIME SERIES WITH APPLICATION TO TESTING INDEPENDENCE

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In this talk I will present a fully non-parametric approach to testing statistical hypotheses about highly dependent time series. The only assumption made on the mechanism generating data in this approach is that the time series are stationary ergodic, which is one of the weakest assumptions made in statistics. I will consider some specific problems, such as testing independence, time series classification and clustering, and will also present a general result on the existence of consistent tests for composite hypotheses about stationary ergodic time series.

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