



Departamento de Ingeniería de Comunicaciones

CONFERENCIA

**Faster-than-Nyquist transmission
for wireless and optical fibre
communication**

impartida por

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Resumen: Faster-than-Nyquist transmission (FTN) is a well-known paradigm for digital communication which has received renewed attention in the wake of the need for increasing spectral efficiency in wireless and optical fibre communication. FTN surrenders the concept of transmitting orthogonal signal elements for the benefit of tighter packing of data into time-frequency resources and thus higher data rates in the same Fourier bandwidth. In this presentation, we will revisit the underlying principles of FTN, elaborate on its pros and cons for modern communication systems and present selected numerical results to highlight its potential as an resource efficient signaling scheme.