



Departamento de  
Teoría e Historia  
Económica

## Seminario: Oihane Gallo (HEC, University of Lausanne)

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**Título:** Anonymity and strategy-proofness on a domain of single-peaked and single-dipped preferences

**Sala:** E22

**Hora:** 12.30

**Resumen:** We analyze the problem of locating a public facility on a line in a society where agents can have either single-peaked preferences or single-dipped preferences. We consider the domain analyzed in Alcalde-Unzu et al. (2023) where the type of preference of each agent is public information and both the location of her peak/dip and the rest of the preference are unknown. We characterize all strategy-proof and anonymous rules on this domain. We first show the additional conditions that anonymity imposes on the strategy-proof rules characterized by Alcalde-Unzu et al. (2023). We also provide an alternative “two-step characterization”: First, the median between the peaks and a collection of fixed values is computed (Moulin, 1980) and, as a result, either a single alternative or a pair of contiguous alternatives arise. If the outcome of the median is a pair, we apply a “double-quota majority method” in the second step to choose between the two alternatives of the pair (Moulin, 1983). Finally, we show the equivalence between the two characterizations.

