

**SEMINARIO**

**MATEMÁTICAS DISCRETAS**

**EXPOSITOR**

***Antonio Fernández-Anta,***

***IMDEA Networks, Madrid, Spain***

**TITULO**

***Fair Linking Mechanisms for Resource Allocation with Correlated Player Types***

***Abstract:***

Resource allocation is one of the most relevant problems in the area of Mechanism Design for computing systems. Devising algorithms capable of providing efficient and fair allocation is the objective of many previous research efforts. Usually, the mechanisms they propose use payments in order to deal with selfishness. Since using payments is undesirable in some contexts, a family of mechanisms without payments is proposed in this paper. These mechanisms extend the Linking Mechanism of Jackson and Sonnenschein introducing a generic concept of fairness with correlated preferences. We prove that these mechanisms have good incentive, fairness, and efficiency properties. To conclude, we provide an algorithm, based on the mechanisms, that could be used in practical computing environments.

Date: Friday 5 December, 16:15

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Host: Ivan Rapaport

