

Spectrum auctions for mobile data

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Over the last 20 years, auctions have become the preferred means by which telecommunications regulators make spectrum available for new services. As the demand for spectrum has increased, its efficient allocation has been underpinned by rapid advances in auction design and implementation, including the introduction of "combinatorial" auctions and the completion earlier this year in the USA of the first major "incentive" auction. This talk will give an overview of these auctions and the role that mathematics has played in ensuring that they keep pace with the apparently insatiable demand for mobile data services.