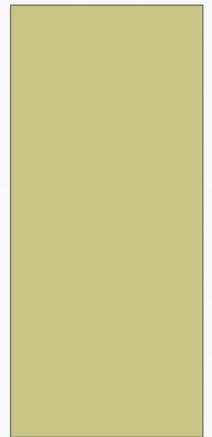


# DESIGN OPTION FOR THE FCC INCENTIVE AUCTION

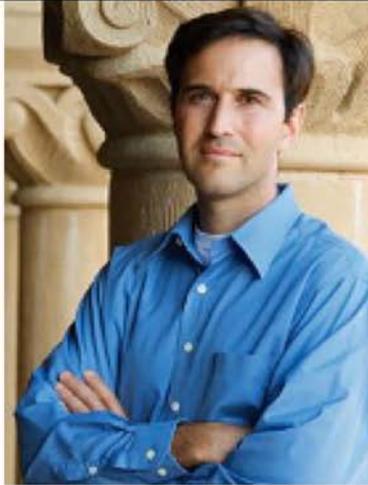
PAUL MILGROM  
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# DESIGN TEAM



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# FCC-SPECIFIED DESIGN GOALS

- Efficient outcomes
- Acceptable revenues
- Minimize gaming and strategic behavior
- Avoid “windfalls” to bidders
- Feasible to implement in acceptable time frame
- Voluntary
- Simple to understand and participate
- Transparent (during and after the auction)
- *The complexity of “repacking” remaining broadcasters raises unprecedented challenges for an auction.*
  - *Which combinations of stations can continue to broadcast while achieving a given clearing target?*

# SUBSIDIARY GOALS

- Highest priority is to attract smaller broadcasters with reverse auction that is...
  - Simple/obvious/strategy-proof.
  - Brief.
  - Dynamic (multi-round).
- ... while paying attention to spectrum acquisition costs!
- Make the forward auction fast!
  - Cut time of traditional auctions by 60-70%
  - Without damaging efficiency of assignments.
- Make the computations fast and perfect!
- Optimize trade-offs when clearing markets.

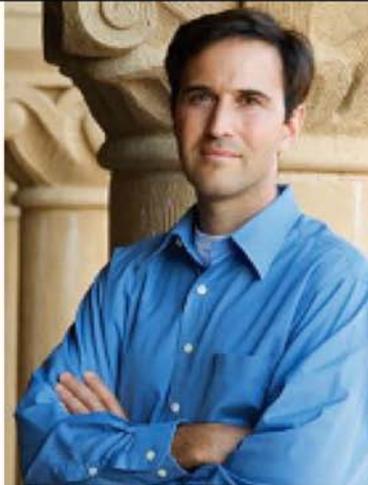
# NEXT ANALYSES

- Bids for channel sharing
- Auction prototypes for user experience
- Simulations to test performance of alternative algorithms in hypothetical scenarios
  - VHF options
  - Rounds required
  - Efficiency of packing
  - Ranges of prices
- ....
- Decisions by the Commission

# CONSULTING TEAM



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