Solving 7x7 Hex:
Virtual Connections and
Game-State Reduction

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• virtual-connection:
  cells of a
  2nd-player-win
  cell-to-cell subgame

• semi-connection:
  cells of a
  1st-player-win
  cell-to-cell subgame

• we use
  – fixed game-state vc/sc combining rules
    (Anshelevich)
  – dynamic game-state vc/sc combining rules
    (Van Rijswijck)
  – search restriction (”mustplay region”)
    (Berge)
  – game-state reduction
    (H.)
  – a computer

to find
  – all opening winning 7x7 Hex moves
the game of Hex
opening winning moves: previous results
new results
Solving 7x7 Hex

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