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Partial Proposal for 802.11n: ITR Preamble Specification

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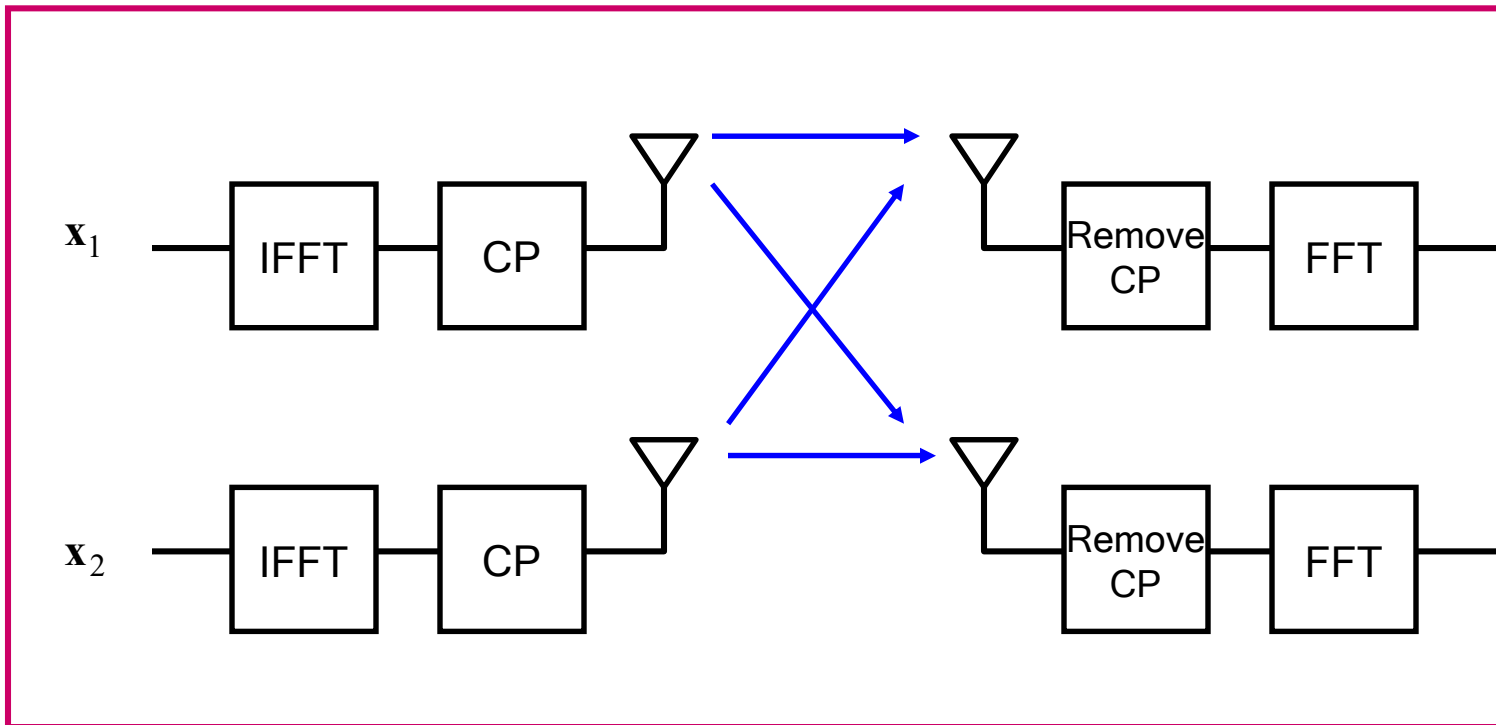
Stanford University

Department of Electrical Engineering

Outline

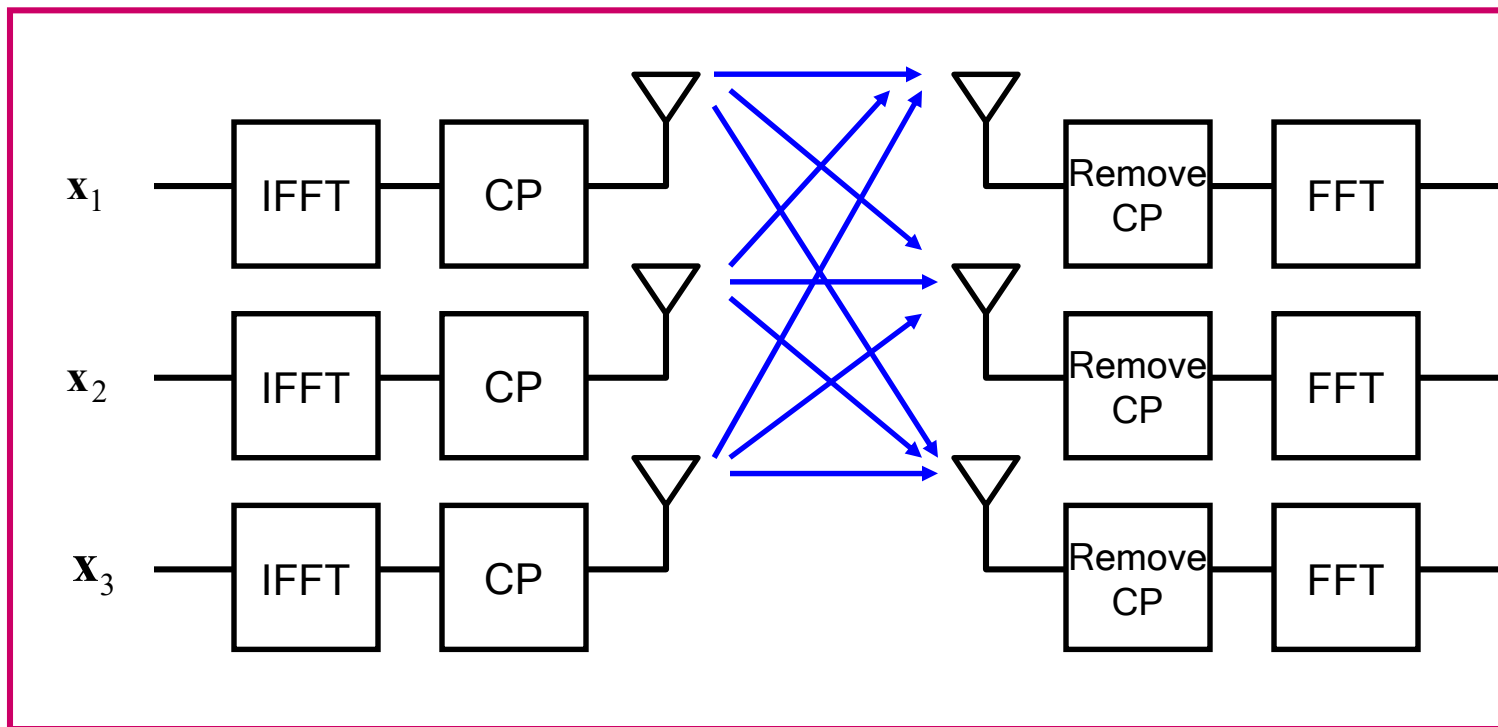
- System block diagram
- Proposed preamble structure
- Short training symbol
 - Purpose of short training symbol
 - Construction of short training symbol
 - Numerical Results
- Long training symbol
 - Purpose of long training symbol
 - Construction of long training symbol
 - Numerical Results
- Conclusion

System block diagram (2 x 2 case)



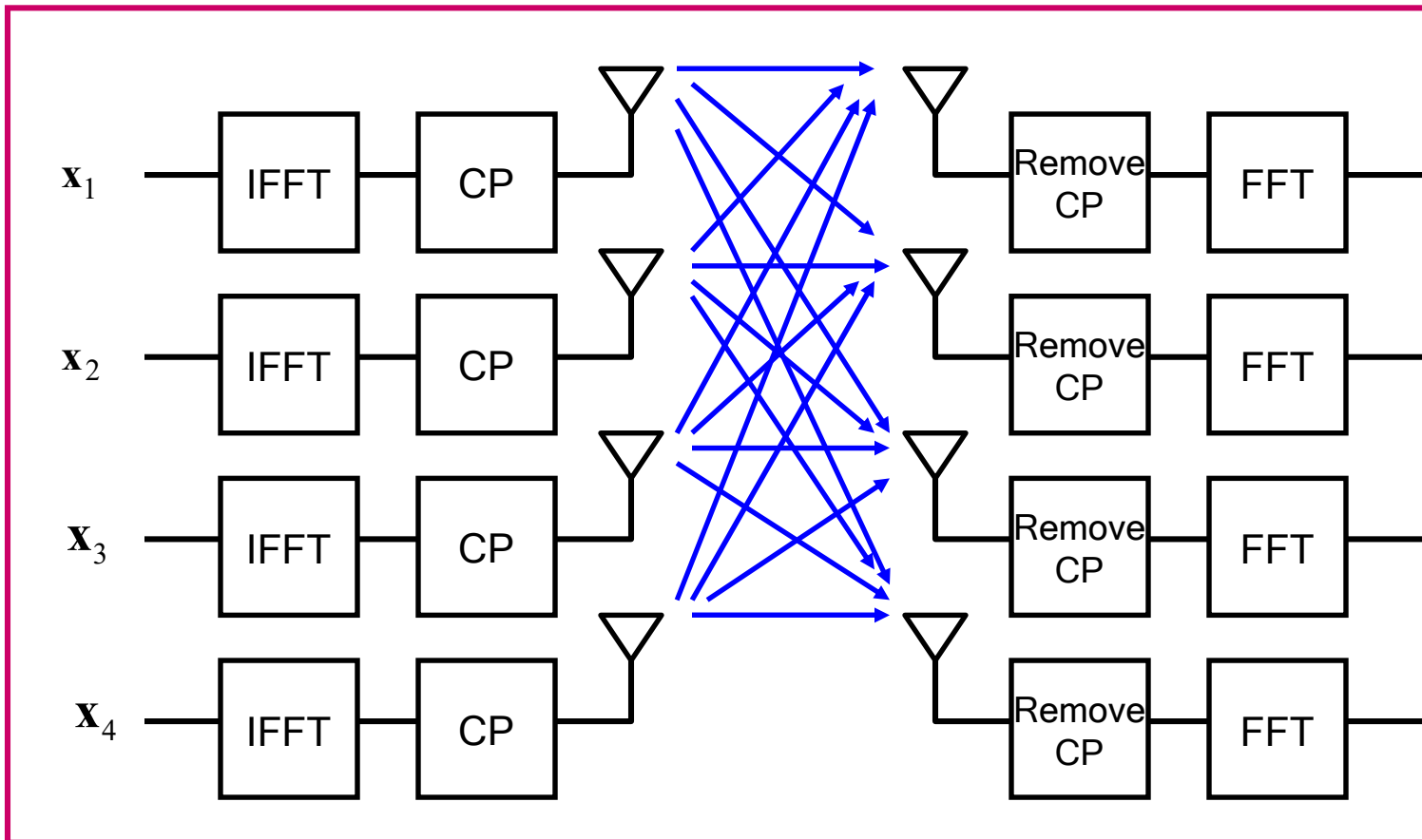
$$\mathbf{y}_j = \sum_{i=1}^2 \mathbf{H}_{j,i} \mathbf{x}_i + \mathbf{n}_j, j = 1, 2$$

System block diagram (3 x 3 case)



$$\mathbf{y}_j = \sum_{i=1}^3 \mathbf{H}_{j,i} \mathbf{x}_i + \mathbf{n}_j, j = 1, 2, 3$$

System block diagram (4 x 4 case)



$$y_j = \sum_{i=1}^4 \mathbf{H}_{j,i} x_i + n_j, j = 1, 2, 3, 4$$

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