1. Motivation
Video compression and communication
- Real time data transmission
- Realistic channel
- Adaptive system
- Feedback channel for controlling and management

Classical separation principle
- Video (source) coding: operate closely to the rate-distortion bound
- Communication system: operate closely to the channel capacity

Assumptions do not hold in practice
- (i) long block lengths for source and channel codes
- (ii) high computational resources and associated delays

Goal
Minimize the end-to-end distortion of the delivered copy of the source under some constraints: bandwidth, transmission power or energy, delay and complexity.

2. Videocoding system: HEVC
- Adaptive parameters, e.g., space resolution and QP

3. Communication system: OFDM block diagram

4. Optimization
- Lagrangian Optimization
- Dynamic Programming

5. Conclusions and future work
- Search for optimization procedures
- Bit-sensitivity study