
2014 無線通訊系統 Project

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COST 207 Channel Emulator

- **Implement the Reduced Typical Urban (TU) Model with modification (Doppler Spectrum: CLASS, GAUS1 and GAUS2; $M = 16$)**
- Input parameters:
 - Doppler spectrum parameters: $a_1, v_{11}, v_{21}, a_2, v_{12}, v_{22}$
 - MS velocity
 - 6 taps power delay profiles, ...
- Output results: **all the results must be derived from the outputs of the channel emulator, not derived from theoretical formulas**
 - Fading gain distribution
 - Time-domain characteristics (Strength profile, Auto-correlation, Level crossing rate, Average fade duration, Coherence time, ...)
 - Frequency-domain characteristics (Strength profile, Auto-correlation, Coherence bandwidth, Doppler spread/spectrum, ...)
 - Cross-correlation between different paths
 - ... (Any results that can present your work better)
- Due: **1/25** (Mail your program (with proper comments) and report to TA)