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 date: **1/6** (Mail your program (with proper comments) and report to TA)