

Concentration Inequalities, Oracles, and Applications

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Outline: Week 6

- 1) Suprema of Gaussian processes in continuous time; continuity of sample paths and boundedness;
- 2) Sufficient conditions for continuity in the compact case;
- 3) Conditions for boundedness; the condition of Landau and Shepp;
- 4) Definition of metric entropy; statement of metric entropy condition;
- 5) Continuity, boundedness, and concrete bounds on the expectation of the supremum under metric entropy condition;
- 6) The stationary time series case; behavior of the maximum.