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# Random Matrices, Random Graphs and Statistical Physics for Machine Learning and Inference | (smr 3703)

**Monday 16 May 2022**

**Least-square optimization on the sphere: lessons from RMT and replicas - Giambiagi**

**Lecture Hall (AGH) (11:25-16:45)**

| time  | title                                                                                                                             | presenter      |
|-------|-----------------------------------------------------------------------------------------------------------------------------------|----------------|
| 11:25 | General setting: minimisation of a quadratic loss function with random coefficients and spherical constraint                      | PIERPAOLO VIVO |
| 12:10 | Lunch Break                                                                                                                       |                |
| 14:00 | The “Procrustes problem”                                                                                                          | PIERPAOLO VIVO |
| 14:45 | Break                                                                                                                             |                |
| 15:00 | Recent free probability methods for large random matrices: computational aspects for non standard random matrix ensembles Part I  | CAMILLE MALE   |
| 15:45 | Break                                                                                                                             |                |
| 16:00 | Recent free probability methods for large random matrices: computational aspects for non standard random matrix ensembles Part II | CAMILLE MALE   |