ID de Contribution: **5** Type: **Non spécifié**

Mini-course 1: on discrete integration by parts methods

mardi 14 avril 2026 10:45 (1h 30m)

The course will review several aspects of **discrete integration by parts methods**. The ultimate goal is to construct finite difference approximations of the first order derivative that satisfy a similar integration by parts formula as in the continuous setting on a half-line. Basic questions (and partial answers) include existence, uniqueness and non-existence results. We shall connect the theory with various problems in matrix theory or discrete mathematics (Hankel determinants, Vandermonde matrices, Bernoulli polynomials etc.). Several open questions will be listed.

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