Local Theory of Banach spaces
Math 617
September – December 2013

Time: Mondays 10:00-10:50 in CAB 657 and Wednesdays 16:00-17:50 in CAB 457.

Instructors: Alexander Litvak and Nicole Tomczak-Jaegermann
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             `http://www.math.ualberta.ca/Tomczak-Jaegermann_N.html`
Office Hours: by appointment with either instructor

Recommended books (no textbook needed):
1. W. B. Johnson, J. Lindenstrauss, "Handbook on Geometry of Banach spaces" (selected sections),
2. V. Milman, G. Schechtman, "Asymptotic Theory of Normed Spaces,"
3. G. Pisier, "Factorization of Operators,"
4. G. Pisier, "Volume of Convex Bodies and Banach Space Geometry,"
5. N. Tomczak-Jaegermann, "Operator Ideals and Banach-Mazur Distances."

Prerequisite: Math 417-418 or equivalent.   **Co-requisite:** Math 516 or equivalent.

Topics (time permitting): Tensor products of Banach spaces, operator ideals, type and cotype, K-convexity, concentration of measure, Dvoretsky's theorem, volumetric and entropic methods, random sections and projections, Gaussian processes.

Grading Policy:
Course grade will be based on in-class participation and upon oral presentations.

Dates:
First Class: *Sept. 4*;
No classes: *Oct. 14, Nov. 11*;
Last class: *Dec. 4;*