

Computations with Matrices and Polynomials

Victor Pan, Distinguished Professor,

Fellow of the American Math. Society designated for his
Contributions to the Mathematical Theory of Computation

SPRING 2020 Code CSc 87100/CRN 64061, 3 credits,

Fridays, 2.00 – 4.00 p.m., Room 3308, followed by

optional no credit seminar 4.15-6.15 pm., Room

3212. Syllabus, an Extended List of Tentative Subjects

and Lecture Notes are available upon request from

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The course covers topics of Computations with Matrices and Polynomials, which are omnipresent in Modern Computations; The tentative list of subjects includes hot topics of structured matrices (such as Toeplitz and Hankel matrices), Low Rank Approximation and Least Squares Regression, but in the first weeks of the semester the instructor will *ADJUST THE LIST OF TOPICS TO STUDENTS' INTERESTS* and will facilitate the study by supplying reading materials.

The Instructor has decades-long experience of teaching these subjects. He published on them four books with Springer, Birkhaeuser and Elsevier (over 1500 pages overall) and has about 300 other refereed research and survey publications, many of them joint with his present and former students.

He was students' advisor and mentor in 24 successful PhD defenses in CUNY and is supporting students' research from his NSF Grants (\$1,056,291 overall) and PSC CUNY Award (\$11,998), but *the students would obtain 3 credits just for successful learning.*