Matrix Computations & Scientific Computing Seminar

Organizer: James Demmel & Ming Gu

Wednesday, 11:00am–12:00pm, 380 Soda

Sept. 29   **Prof. W. Kahan**, UC Berkeley
A Tutorial Overview of Vector and Matrix Norms

Intended for new graduate students whose experience as undergraduates may have prepared them inadequately to apply norms to numerical error-analysis and proofs of convergence, this tutorial surveys norms for finite-dimensional spaces in a way that may ease a transition to the infinite-dimensional spaces of Functional Analysis. The tutorial's notation is mostly standard but interpreted in ways not always taught to undergraduates, so attendees may prepare for it by reading just two of my lecture notes for Math. H110 posted at <eecs.berkeley.edu/MathH110/2Dspaces.pdf> and .../pts.pdf> in that order, and then .../GEO.pdf> and .../GEOS.pdf> skimmed lightly. The tutorial will omit proofs; almost all can be found in .../NORMlite.pdf> and .../GIlite.pdf> . The tutorial's text will be posted at .../29Sept10.pdf> .