

ISTeC (Information Science and Technology Center) Research Advisory Committee
 Retreat on the Scientific and Engineering Foundations of Information Science and
 Technology
 Saturday, May 8, 8:15am to 3:00pm, Lory Student Center

DOSSIER

Name:	Holger Kley
Department:	Mathematics
Email:	Kley@math.colostate.edu
Office Tel:	1 - 0549
WWW URL:	Http://www.math.colostate.edu/~kley/index.html
Research Interests (one paragraph): Algebraic Geometry. Specifically, intersection theory, (generalized) Schubert calculus, Gromov-Witten theory. Potential applications to data analysis and signal processing.	
Titles of current research projects (funded or not): Littlewood-Richardson rules for generalized Grassmannians and two-step flag varieties. New algebro-geometric tools for data analysis.	
Current collaborations inside and outside your department: Peterson, Kirby (math), Beveridge, Draper, Anderson (CS – proposed), Betram (math, University of Utah)	
Breakout sessions you would like to attend at the retreat (please rank order from 1 to 3):	
	Alternative models of computing
2	Computing and information processing in support of basic science and engineering
	Dense sensor networks
3	Imaging and tracking
1	Automatic image, text, and speech recognition for multimodal interfaces and search engines
	Other (Please suggest a title.)

Faculty at CSU whom you would like to see included into your preferred breakout group:

One optional paragraph you would like other participants to read before the retreat:
I'm just beginning to explore the possibility of information-theoretic applications of the kind of algebraic geometry I do.