Steven Lambert abstract for HUGS talk

June 12, 2017

**Life of an Industrial Physicist in Silicon Valley**

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Hard disk drives are marvels of technology. Each drive shipping today includes magnetic tunnel junctions to read data, thermal expansion actuators to precisely adjust head-disk spacing to ~1nm, and data tracks only 70nm wide. Next generation technology could include laser heating of the disk surface to facilitate the writing process. An army of physicists, engineers, and materials scientists are responsible for a continuing stream of innovations that have made hard drives the essential enabler for data storage in “the cloud”. Hard disk drive companies are just one of the numerous industries where physicists make essential contributions. This talk will use aspects of my 27 year career in magnetic recording to illustrate what it’s like for a physicist to work in industry. Employment statistics, salary trends, and APS resources to help with a career search will also be discussed.