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Abstract for an Invited Paper  
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**Physics and hard disk drives- an industrial career perspective**

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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 about 1nm, and data tracks only 70nm wide. 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. I will use experiences from my 27 years developing magnetic recording technology in Silicon Valley to illustrate what it’s like for a physicist to work in industry. I will highlight the skills that help to enable success in the private sector, and some of the challenges of transitioning from academia to industry.