

Next-Generation Storage: Terabytes on a Disc

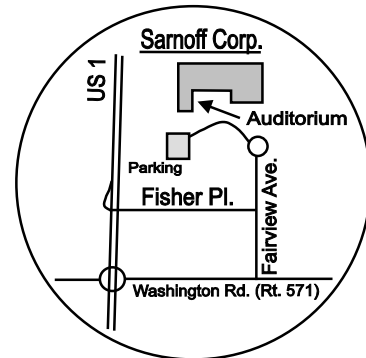
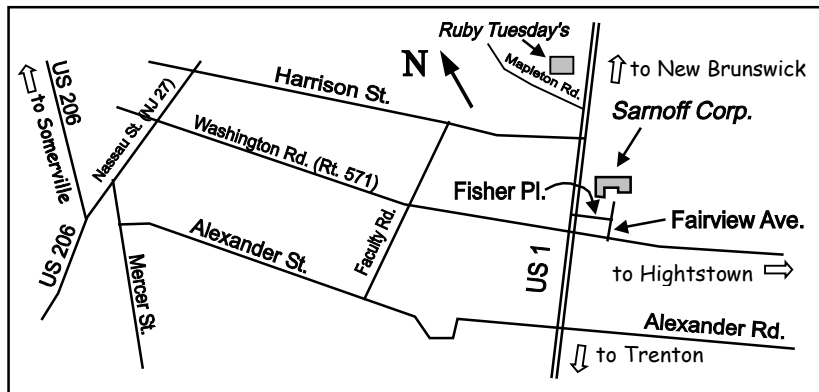
Mark Knox, Tony Jasionowski, and Jim Hegadorn

How much capacity is enough? CDs now seem tiny compared to 4.7 GB DVDs, which are now also available in 8.5 GB dual-layer. But that's not enough for our insatiable need for storage, especially with the advent of high-definition video formats.

Our first two speakers, Mark Knox (from Toshiba) and Tony Jasionowski (from Panasonic Corp.), will discuss the next step to blue-laser DVD discs, with two competing formats due to ship early next year – HD DVD and Blu-ray Disc. These products not only offer more data density, 15 to 25 GB per layer, but also multiple layers, 2 to 3 to 4 to maybe 8 layers, with the promise of up to 45 to 100 to 200 GB per disc.

But these are incremental improvements – maybe it's time for a new technological approach to the promise of holographic storage, the far-out dreams of Star Trek coming back to earth in real products as early as next year. Jim Hegadorn (from Fuji Photo Film USA) will explore the development of holographic storage, promising capacities of 200 GB in 2006, with a path to 1 TB and beyond. That's trillions of bytes, over 200 times the capacity of a DVD, on a disc with the same form factor.

Date: Thursday, November 17, 2005, 8:00 pm (Refreshments at 7:30 pm)
Place: Sarnoff Corp., Routes 1 and 571, Princeton, NJ
Information: Rebecca Mercuri (609) 895-1375, Dennis Mancl (908) 582-7086
On-line info: http://www.acm.org/chapters/princetonacm



All ACM / IEEE-CS meetings are open to the public. Students and their parents are welcome. There is no admission charge, and refreshments are served.

A pre-meeting dinner with the speaker is held at 6:00 p.m. at Ruby Tuesday's Restaurant on US 1. Please send email to princetonacm@acm.org in advance if you plan to attend the dinner.