

CENTER FOR BEAM PHYSICS SEMINAR

“Molecular Synchrotron Storage Ring”

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Friday September 27, 2002, 10:30 AM
Albert Ghiorso Conference Room (71-264), LBNL
••• Refreshments served at 10:20 AM•••

Abstract: Neutral molecules can be accelerated / decelerated and stored in a synchrotron storage ring by using their electric dipole moment induced by an external field. A compact ring is designed to determine the feasibility and practicality of constructing molecular synchrotrons to store, slow, and cool neutral polar molecules in a way that makes it easy to use them in novel new experiments, including the possible formation of molecular Bose-Einstein condensates.

Biographical data and research interests: Hiroshi Nishimura obtained his Ph.D. in accelerator physics from Tokyo University on the beam instability of the KEK TRISTAN ring. He has been at ALS since he came to U.S. in 1985 to join the ALS design team.