

**BIOGRAPHY:** Dr. Timothy W. Koeth has over fifteen years of technical and leadership experience in accelerator physics and engineering. He completed his doctoral work at Fermi National Accelerator Lab where he led two accelerator projects. He led the effort to bring the first high-gradient superconducting RF cavity at Fermilab into operation. Next he designed and performed the first experimental demonstration of a longitudinal-transverse phase space exchange. His thesis won the Rutgers’ Professor Plano Thesis Award acknowledging his thesis as the overall best that year. Presently his research investigates space charge dominated beams at University of Maryland Electron Ring. He has developed novel diagnostic techniques that have experimentally verified space charge effects predicted by simulation. Dr. Koeth is active in accelerator physics education, he has advised eight graduate students and more than twenty undergraduate students. His educational accelerator program has brought seven students to pursue accelerator physics careers in both industry and academia. His students have been recognized by prestigious awards, most recently two were the recipients of the NSF Graduate Fellowship and one of the Henry Rutgers Scholars Award. Dr. Koeth is an instructor at the United States Particle Accelerator School; he has co-instructed Accelerator Fundamentals as well as developed and taught a new course on Cyclotrons & Their Design first held at Duke University in 2013 and to be repeated at Rutgers in 2015. As part of the scientific program committee, he was invited to chair the inaugural session on educational cyclotrons at the 2013 International Conference on Cyclotrons and their Applications. Dr. Koeth is currently the Director of the University of Maryland Nuclear Reactor & Radiation Facilities, which includes the Maryland 250 kW Training Reactor, a panoramic Co irradiator and two high power linear accelerators. Dr. Koeth is an NRC licensed Senior Reactor Operator. He is interested in coupling his experience of cyclotrons and intense charged particle beams with sub-critical piles in the field of Accelerator Driven Systems and in the medical uses of accelerators. He has more than seventy-five scientific publications, has given nearly thirty invited presentations of his work, holds one patent and is involved in collaborations throughout the world.