

LEPP JOURNAL CLUB

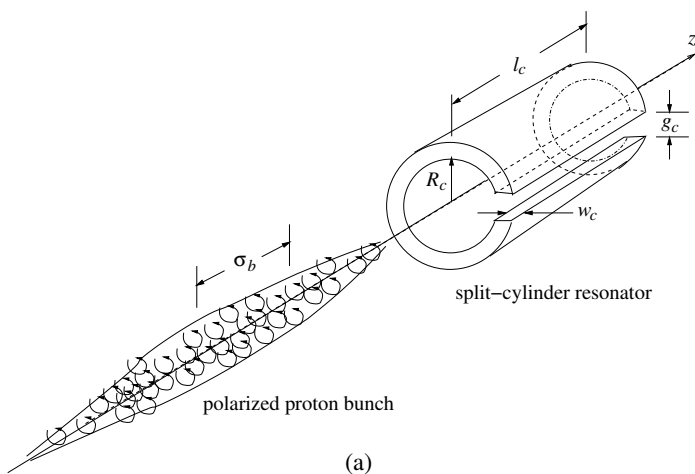
Richard Talman
Cornell University



Storage Ring Measurement of the Proton Electric Dipole Moment

Electric dipole moment (EDM) measurements may help to answer the question “Why is there more matter than anti-matter in the present universe?”

For a charged baryon like the proton such a measurement is thinkable only in a storage ring in which a bunch of protons is stored for more than a few minutes, with polarization “frozen” (relative to the beam velocity) and with polarization not attenuated by decoherence. After describing the salient issues for the experiment, the lecture will discuss novel polarimetry methods that are expected to make the experiment practical. Aspects of the experiment that are well-matched to LEPP capabilities will be emphasized.



Friday
October 26, 4:00pm
301 Physical Sciences Building
(Refreshments, 3:45pm)

