

Abstract Submitted  
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**Design and Commissioning of a new Ion Momentum Imaging Spectrometer** DANIEL ROLLES, MARK PERRI, RENE BILODEAU, Physics Department, Western Michigan University, Kalamazoo, MI, 49008, USA, DAVID KILCOYNE, GLENN ACKERMAN, JOHN BOZEK, Advanced Light Source, Lawrence Berkeley National Laboratory, Berkeley, CA, 94720, USA, NORA BERRAH, Physics Department, Western Michigan University, Kalamazoo, MI, 49008, USA — We have built a velocity map ion imaging spectrometer designed for valence and core-shell photoionization studies of molecules, ions and clusters. The spectrometer is equipped with 4 electrostatic lenses, which focus the fragment ions on a position-sensitive Roentdek Hex-80 anode. It can be employed for electron-ion coincidence experiments in both multi- as well as two-bunch mode using static or pulsed ion extraction fields. First results for the photoionization of small molecules and clusters will be presented.

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