Our team, made up of members of the High Energy Physics department at the University of Michigan and the American Physical Society, is addressing the need for the recording, archiving and distribution of talks, specifically the many parallel sessions at large national meetings. We are building a Web Lecture Archiving System, consisting of a “Lecture Object” standard for organizing the data and metadata in an open and easily-transferable fashion, an automated capture device equipped with robotic tracking camera, and an archive for storing the Lecture Objects coupled with a web server to stream the media to anyone in the world. The Lecture Object standard conforms to RDF/XML, Dublin Core and Learning Object Metadata standards. The capture device consists of computers and audio/video equipment capable of capturing high-quality audio/video of the speaker and audience, the high-resolution image from the speaker’s presentation laptop, and a robotic camera that follows the speaker around the stage, eliminating the need for and considerable expense required for a camera operator. This capture device generates a media object conforming to our Lecture Object standard, available immediately after the talk’s end. There are two identical servers for redundancy, each holding 3 Terabytes of Lecture Objects, and each equipped with streaming software to make presentations available on demand to anyone in the world with a web browser.