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Using PreTeXt to produce a better online text (or lab manual) JOSEPH CHRISTENSEN, Thomas More College — In response to the pressure to use an online text while observing that most online texts are merely the image of the printed page, I searched for options to create a better online textbook. I found two sources for open-source, online textbooks. After acknowledging OpenStax CNX, I will introduce the physics community to a format that has recently been growing in and from the math community: "PreTeXt; write once, read anywhere." With an awareness of the functionality of LaTeX, the creators of PreTeXt have developed XML tags, similar to LaTeX commands, that allow one to quickly translate their source-text into either LaTeX or HTML so that the document can be easily produced in either PDF, print, or online. They also have plans for output as Jupyter notebooks and EPUB documents. In this talk, I will showcase a recent conversion of our lab manual into PreTeXt to show what is possible as well as initiate some discussion about the possibilities for a cross-referenced (hyper-linked) textbook that helps students see the connections between the topics of physics. I will conclude the talk by introducing attendees to the resources available to begin creating your own source material.

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