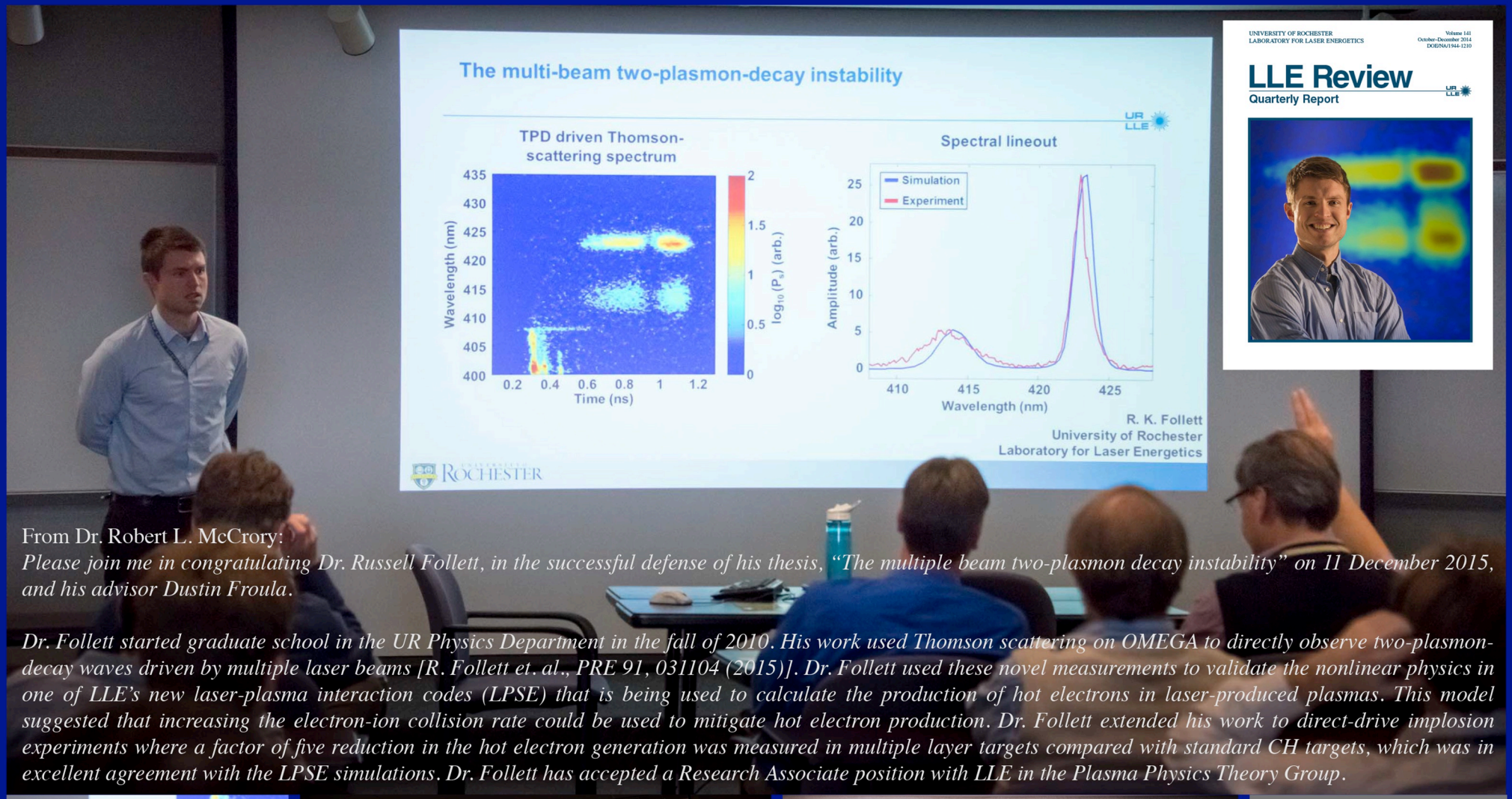

From Dr. Robert L. McCrory:

Please join me in congratulating Dr. Russell Follett, in the successful defense of his thesis, "The multiple beam two-plasmon decay instability" on 11 December 2015, and his advisor Dustin Froula.

Dr. Follett started graduate school in the UR Physics Department in the fall of 2010. His work used Thomson scattering on OMEGA to directly observe two-plasmon-decay waves driven by multiple laser beams [R. Follett et. al., PRE 91, 031104 (2015)]. Dr. Follett used these novel measurements to validate the nonlinear physics in one of LLE's new laser-plasma interaction codes (LPSE) that is being used to calculate the production of hot electrons in laser-produced plasmas. This model suggested that increasing the electron-ion collision rate could be used to mitigate hot electron production. Dr. Follett extended his work to direct-drive implosion experiments where a factor of five reduction in the hot electron generation was measured in multiple layer targets compared with standard CH targets, which was in excellent agreement with the LPSE simulations. Dr. Follett has accepted a Research Associate position with LLE in the Plasma Physics Theory Group.

Thesis Defense

Dr. Russell Follett

11 December 2015

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by eugene kowaluk