

## Phi Beta Kappa Weber Prize Nomination

Huan Quang Bui '21

**Prompt:** How do you envision applying your undergraduate liberal arts learning in your future studies and career? (*Strict word limit: 250 words!*)

In addition to the technical knowledge I learned working in Professor Charles Conover's physics laboratory, which I will continue to use and develop during my PhD at MIT, the liberal arts education at Colby has enriched my path to a physics career in many wonderful ways.

For every semester since my sophomore year, I have been encouraged by the physics department to take one independent study where I would explore, purely out of curiosity, topics beyond the standard physics curriculum. Through these self-guided classes, I not only broadened my physics knowledge but also became more independent as a learner and more confident in my ability to ask the "right" questions and problem-solve on my own, which is immensely important in research.

As a physics-mathematics double major, I have spent a great deal of time on the 2nd floor of Davis where I learned the power of sound (mathematical) reasoning and the value of good writing when expressing my ideas or arguments. With Professor Evan Randles, I also thoroughly enjoyed working on mathematics research, which ultimately influenced my graduate school decision: I want to work with ultracold quantum gases at MIT because of the strong interplay between experiment and theory.

Finally, from CLAS and my experience TA-ing and tutoring at Colby, I developed an interest in teaching and, more generally, science/mathematics communication through writing and public speaking. As a result, upon receiving my PhD, I aim to continue research in physics and eventually obtain faculty position at a research university.