**Brown students care deeply about their work and the world around them. Students find contentment, satisfaction, and meaning in daily interactions and major discoveries. Whether big or small, mundane or spectacular, tell us about something that brings you joy. (200-250 words)\***

I love to “connect the dots”. Perhaps it’s by fate that this mostly happens when learning new concepts, especially in physics. They don’t have to be complicated, as long as I gain a new understanding of everything’s interconnectedness, I experience what I can only describe as a “Wow! That’s so cool!”

For instance, upon learning the kinetic-energy formula, I wondered why it had to be proportional to the square of velocity. I realized, from contemplation, that it involved Pythagoras’ theorem. Assume that 1-unit of energy accelerates an object to 1m/s northwards, and another to 1m/s eastwards. 2-units of energy were expended, but the velocity is only square-root 2m/s north-eastwards, it must be squared before it’s proportional to energy (to be consistent with conservation of energy).

There are many other examples, such as the realization that the color of stars were caused by the different energies of emitted photons, or that the magnetic properties of transition elements are related to the polarity of d-orbitals.

What impresses me every-time I have these realizations is that despite the complexity of the universe, its laws are consistent. This is why I’m so interested in physics: it’s packed full of correlations to be deciphered as every interaction is somehow intertwined, and discovering them exhilarates me. I would often interrupt my classes or conversations to passionately share my moments, like a child pointing at an ice-cream-truck. My friends were usually disinterested, but even just vocalizing my thoughts inspires me to think and understand.