Why should we integrate Computer Algebra System with Interactive Geometry?

Wei-Chi Yang, Radford University, USA

On one hand, Computer Algebra System (CAS) allows users to make crucial conjectures and even assist in proving theorems. On the other hand, Interactive Geometry provides users motivations and intuitions when solving problems. In this presentation, I shall demonstrate

1. How we can expand our knowledge horizon by integrating CAS with Interactive Geometry.
2. How geometric approaches provide critical intuition and motivations to learners and algebraic approaches challenge those students who want to do more.
3. How content evolve when technological tools advance.
4. Why plenty of interesting problems awaiting us to explore if learners are properly introduced to the latest technological tools and have an opportunity to engage with an appropriate dynamic content.

Integration of CAS with Interactive Geometry will not only allow us generalizing traditional theorems but also provide us an excellent methodology to deal with many real-life problems.