

## **Statement of teaching philosophy**

My earlier interest in natural sciences was stimulated by high school competitions in mathematics, physics and chemistry. Later, I regularly graded mathematics competitions and composed several original problems.

I would like to utilize long term experience in solving various problems of physics and mathematics by teaching courses in physics, mathematics, or theoretical chemistry. In 2001, I taught a course for graduate students “Asymptotical methods, complex variables, and their application in quantum mechanics” that basically spans my research interests. There, I started from complex numbers and analytic functions, and finally ended with applications to approximate methods in quantum mechanics. I focused on clear step by step understanding and developing of problem solving skills. I used extensively visualizations of various mathematical concepts (based on Mathematica computing package) which significantly facilitate understanding.

More recently, I taught several substitution lessons in mathematics for chemistry students in University of Massachusetts at Dartmouth, in computation physics in Tulane University, and in general physics in Texas A&M University. In Texas A&M, I volunteered several times to help with demonstrations and experiments during outreach events (physics and chemistry festivals).

Generally, I believe that supplying first hand information is especially important for learning of nature which is described by mathematical language.