

## **Mathematics in High Tech Industries**

To the general public, there is very little difference between mathematics and arithmetic, and calculus is already a mystery, often considered the most advanced class at the college level. Even among our colleagues in academia, mathematical research is not taken seriously enough, and graduate study in mathematics is thought to be mainly training for a teaching career. The myth and truth about our profession will be discussed in this lecture. The goal is to convey the point of view that mathematics is of utmost importance for the advancement of science and technology. Case studies involving the dependence on mathematics in the high tech industries will constitute the bulk of the presentation.