



John Voight
Associate Professor of Mathematics

DARTMOUTH COLLEGE DEPARTMENT OF MATHEMATICS
6188 KEMENY HALL • HANOVER • NEW HAMPSHIRE • 03755-3551

DEPARTMENT TELEPHONE: (603) 646-2415

OFFICE TELEPHONE: (603) 646-2415

DEPARTMENT FAX: (603) 646-1312

ELECTRONIC MAIL: jvoight@gmail.com

WEB SITE: <http://www.math.dartmouth.edu/~jvoight/>

April 14, 2017

To the TEC Committee:

I am writing this letter as a teaching evaluation for Björn Mützel. On Friday, April 14, I visited Björn's Math 8 class *Calculus II*, a second semester course in calculus. I also wrote a letter for him dated April 15, 2016, so my report here will be brief.

Björn started class promptly and took care of administrative announcements (informing students about the upcoming exam, practice exam and solutions). The lecture concerned understanding point sets (mostly surfaces) in 3-dimensional space. He reminded students of basic definitions of vectors and length, and then he asked them to think about the shapes defined by some radial inequalities. Björn used a **Maple** worksheet which allowed him to show pictures of the spheres and other objects. (And to spin them around!) His interchange of lecture with hands-on exercises allowed him to let the students come to their own understanding. He went around and, for example, clarified the difference between the surface of the sphere and the solid ball, and to answer other smaller questions (resolve points of confusion).

He then proceeded to discuss planes. The students replied to his repeated short questions, a nice way to confirm that they are following. He asked them to try to draw pictures of surfaces defined by equations, and again went around to help clarify. (As usual, the students seemed to give up early before starting to draw.) Everyone seemed to be enjoying the effort. As the surface equations got more complicated, and the surfaces were intersected, Björn gave them methods for visualizing them, such as when z does not occur. The students responded well to the instructor's attempts to help them visualize. They were very interactive, and worked together (and with Björn) to build and refine their understanding.

Björn ended with some comments on the homework and rules for dot products. I thought it was a great class! Björn has a nice rapport with the students, and his students were fully engaged.

If you have any questions or need more information, please e-mail me at the address below.

Sincerely,

A handwritten signature in black ink, appearing to read "John Voight". The signature is fluid and cursive, with the first name "John" being more prominent than the last name "Voight".

John Voight
Associate Professor of Mathematics
jvoight@gmail.com