Professor Karen E. Smith to Address Midshipman-Faculty Colloquium

Thursday, October 25, at 6:45 pm in Rickover 102. Reception at 7:45.

The University of Michigan mathematician will focus on the excitement of mathematical discovery and her own journey towards mathematics.

Prof. Smith was a math major at Princeton, and earned her doctorate from the University of Michigan in 1993. She has taught high school mathematics, and at MIT and Michigan. In January of 2001 she was awarded the Ruth Lyttle Satter Prize for her outstanding work in commutative algebra.

Professor Smith’s talk is also the first event of the 2001 Annapolis Algebraic Geometry Conference. A principal organizer is USNA’s Prof. Melles.

Many members of the USNA Mathematics Department have research interests in algebraic geometry or commutative algebra. Among them are Pros. Andre, Hanna, Hoffman, Joyner, Kidwell, Melles, Traves, and Wardlaw.

This issue’s quotation:

How can it be that mathematics, being after all a product of human thought independent of experience, is so admirably adapted to the objects of reality? Albert Einstein

Mathematics majors at the Naval Academy can get an introduction to number theory and commutative algebra in SM362, Modern Algebra.

Prof. Traves is teaching a special topics course on Algebraic Geometry this semester.

Quick problem: Can you find 4 distinct positive integers such that the sum of any 3 of them is a square?

Last issue’s problem: Can you find two odd numbers such that the
sum of their squares is a perfect square?

Answer: No, you can't. Since \((2n+1)^2 = 4n^2 + 4n + 1\), the sum of two odd squares is always even but never a multiple of 4. But every even perfect square is a multiple of 4.

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