BOSTON UNIVERSITY MATHEMATICS COLLOQUIUM

The *ABC* Conjecture

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Friday, October 31 at 4 pm
SCI 117

Abstract: The *ABC* conjecture, first posed in the 1980s, is one of the central problems in number theory. Its statement is completely elementary, while at the same time it is closely related to numerous conjectures and deep theorems that were already known. In 2012 Shinichi Mochizuki announced a proof of the *ABC* conjecture. We will discuss what the *ABC* conjecture says, why it is plausible, and some of its consequences.

From 2:30-3:30 pm, a pre-colloquium talk will be given in MCS 148 by John Bergdall, titled "Integral solutions to Diophantine equations." Abstract: In this talk we will discuss the behavior of integral solutions for some classical Diophantine equations, with a heavy emphasis on qualitative and quantitative phenomena in examples. We will also discuss the historical strategies to finding (or not finding) solutions, in contrast with applications of the ABC conjecture in Professor Conrad's colloquium. At 3:00 pm, tea will be served in MCS 144.