

**THE BIRS FIVE DAY WORKSHOP  
MODULAR FORMS AND STRING DUALITY (06w5041)  
JUNE 3–8, 2006  
PRESS RELEASE**

**Number Theory and String Theory at the Crossroads**

Modular forms have long played a key role in the theory of numbers, including most famously the proof of Fermat's Last Theorem. Through its quest to unify the spectacularly successful theories of quantum mechanics and general relativity, string theory has long suggested deep connections between branches of mathematics such as topology, geometry, representation theory, and combinatorics. Less well-known are the emerging connections between string theory and number theory the subject of next weeks workshop 06w5041: Modular Forms and String Duality at the Banff International Research Centre, June 3 - 8, 2006. Mathematicians and physicists alike will converge on the Banff Centre for a week of both introductory lectures, designed to educate one another in relevant aspects of their subjects, and research talks at the cutting edge of this rapidly growing field. The event also coincides with the introduction of a new journal, "Communications in Number Theory and Physics" (<http://www.intlpress.com/CNTP>) published by International Press, which will provide a venue for dissemination of results at this crossroads well into the future. An expository proceedings for the workshop itself is under consideration for publication by Cambridge University Press.