

The Trivial Notions Seminar  
Proudly Announces

Modular forms and Galois representations

A talk by  
Nicolas Ojeda Bar

**Abstract**

A goal in number theory is to understand the finite extensions of  $\mathbf{Q}$ . By Galois theory, it is equivalent to understand the absolute Galois group  $\text{Gal}(\overline{\mathbf{Q}}/\mathbf{Q})$ . In order to understand this group, it is natural to try to understand its representations. In this expository talk I will present a beautiful classical construction of degree two Galois representations starting from a modular form (a particular kind of holomorphic functions defined on the upper half plane).

Thursday September 23<sup>rd</sup>, at 3:00 pm  
Science Center 507