



*Institute of Mathematical Research  
Department of Mathematics*

## **GEOMETRY SEMINAR**

### **Effective Shafarevich for elliptic curves**

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#### **Abstract**

In the talk we shall discuss the famous Shafarevich conjecture on the isomorphism classes of abelian varieties with good reduction outside a finite set of finite places. The conjecture has been proved by Faltings and is an essential step in the proof of Mordell's conjecture by Faltings. Up to now there is no approach to the conjecture which can be made effective. For elliptic curve this is a theorem of Shafarevich and we give an effective proof based on the Baker theory. This extends work of Coates, Silverman and others.

<b>Date:</b>	<b>July 5, 2010 (Monday)</b>
<b>Time:</b>	<b>4:00 - 5:00pm</b>
<b>Place:</b>	<b>Room 210, Run Run Shaw Bldg., HKU</b>

*All are welcome*