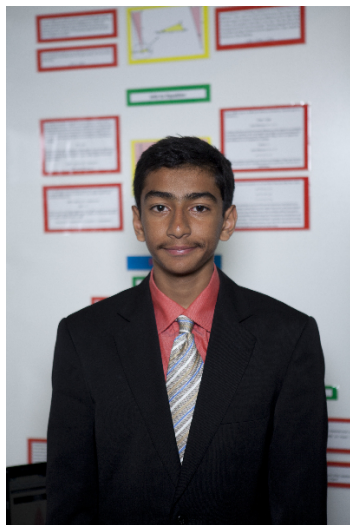


## CWSF 2013 - Lethbridge, Alberta



### Saiyam Patel

#### Double Slit Experiment

**Challenge:** Discovery

**Category:** Junior

**Region:** Toronto

**City:** Toronto, ON

**School:** Churchill Heights P.S.

**Abstract:** The purpose of my project is to prove the wave-particle behaviour of photons and electrons through the Double Slit Experiment and how the act of observing/measuring can change results due to this behaviour. I will also be talking about Wheeler's Delayed Choice Experiment. I will be explaining the equations involved with the experiment and will be concluding with what all this means and the applications.

#### Biography

My name is Saiyam Patel and I am in the Grade 7 gifted program in Churchill Heights Public School, Toronto. I have a great interest in physics, especially quantum physics. I have been participating in the Toronto SciTech Fair since grade 3. This year, I did my project on the Double Slit Experiment. One day I had been reading about the uncertainty principle and saw that it was proved through this experiment. I was very interested. So, I decided to do my science fair project on this. I would like to investigate further how the uncertainty principle can be objected and both values of momentum and position can be exactly found. The advice I would give to students thinking about doing a science fair project would be to do something you are passionate about and can relate to. In my free time, I love playing soccer. I play for the Wexford Eagles Soccer Club as striker and got the most goals in the league last season. For my career, I am thinking of being a quantum physicist for the European Council for Nuclear Research (CERN). With that, I conclude a little summary of my life.

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