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**Transmission Systems**

### **Field trip to Brookhaven National Laboratory (BNL)**

On December 4<sup>th</sup>, 2013, I participated in a field trip sponsored by STEM – NYCCT program from the National Science Foundation. In this trip we went to Brookhaven National Laboratory located in Long Island NY. At the moment I arrived there I was amazed with all the advanced equipment they have for scientific research. One of the most complex and amazing pieces of equipment I saw was the particle collider. This particle collider is a heavy ions accelerator. In this department along with more than 1500 scientists work from many nationalities. One of the physicists was explaining how they carry out experiments, colliding atoms of gold after stripping out all the electrons. Then, this data obtained is analyzed in order to try to understand what happened in the Big Bang when the creation of the universe. Also, we went to a presentation where one of the instrumentation scientists was explaining how BNL is trying to develop the biggest camera in the world which will be used to take pictures of distant galaxies. Based on what the speaker said, this camera will be eventually placed in a deserted zone in Chile. It will be placed there because the dry weather and the altitude of the terrain is suitable for this kind of job.