Self Introduction

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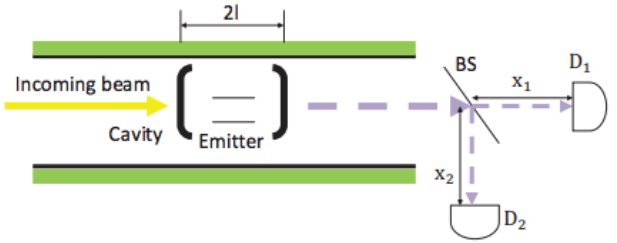
About me

- **Hometown:** Taiyuan, North of China
- **Bachelor degree:** Xi'an Jiaotong University, China, 2011
- **Undergraduate thesis:** Two photons transport in cavity coupled waveguide
- **PhD study:** Stony Brook University, 2012. Adviser: Prof. Abhay Deshpande.
- **Current project:** Run 13 direct photon analysis. Working with Dr. Nils Feege and Dr. Sanghwa Park.

Terracotta Warriors, Xi'an

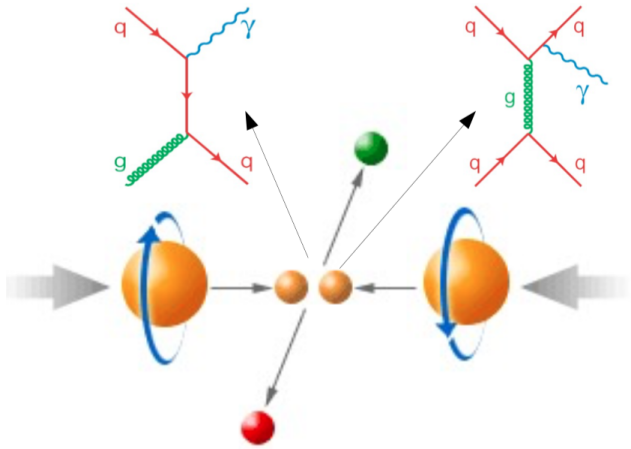


Undergraduate work

Direct photon analysis

- Measure longitudinal double spin asymmetry:

$$A_{LL} = \frac{\sigma_{++} - \sigma_{+-}}{\sigma_{++} + \sigma_{+-}}$$



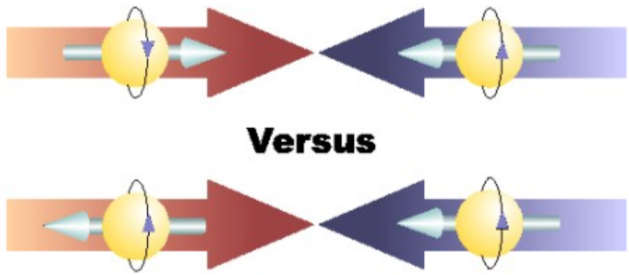
pp collision

- Extract gluon polarization:

$$\Delta\sigma \equiv \frac{1}{2}\left[\Delta\sigma_{++} - \Delta\sigma_{+-}\right]$$

$$= \sum_{i,j,k} \int \Delta f_i(x_1)\, \Delta f_j(x_2)$$

$$\times\, d\Delta\hat{\sigma}_{ij\to k\gamma}(x_1, x_2, z)\, \mathcal{S}\, dx_1 d$$

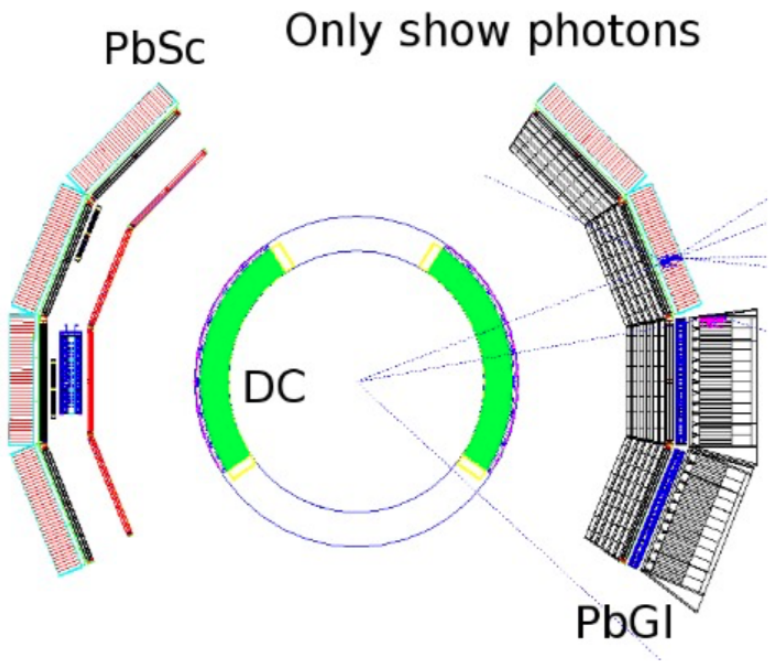


A_{LL} measurement

- Advantage: No fragmentation function.

Methods

- EMCal warnmap, EMCal energy and ToF calibration.
- Use EMCal to count photons.
- Subtract decay photons from π^0, η and ω.
- Calculate cross section. (current)
- Consider spin patterns and calculate A_{LL}.



EMCal

Hobbies

- **Programming:** C++, Python, Assemble.
- **Chess**
- **Sports:** Basketball, badminton, tennis, ping-pong.