Resonance search analysis of 2016 HPS spring run data.

Bump hunt folks

October 17, 2018

Contents

1	Data set	2
2	Event Selections	2
3	Bump hunt analysis	2
4	Study of systematics	2

Introduction

The Heavy Photon Search (HPS) experiment has capability to search for a so called heavy photon (A') with two complementary methods.

1 Data set

Describe the data, beam energy, beam current, target runs, etc.

2 Event Selections

Describe list of cuts for the final event selection, and justification of each cut Main goal of event selections cuts is to maximize signal sensitivity.

3 Bump hunt analysis

4 Study of systematics

Here goes studies on systematics