

Source of systematic uncertainty	Beam pipe (mm)	BPIX detector inner shield (mm)	Pixel detector support tube (mm)
Background shape variation	0.02	0.02	0.04
Background subtraction	<0.01	0.06	0.01
Average background in three neighbor ϕ bins	<0.01	0.02	<0.01
Structure shape variation	<0.01	0.07 (position) 0.14 ($R^{\text{near}}, R^{\text{far}}$)	—
Fit procedure	0.01	0.01	0.04
Vertex reconstruction resolution	0.01	0.01	0.04
Total	0.03	0.17	0.07