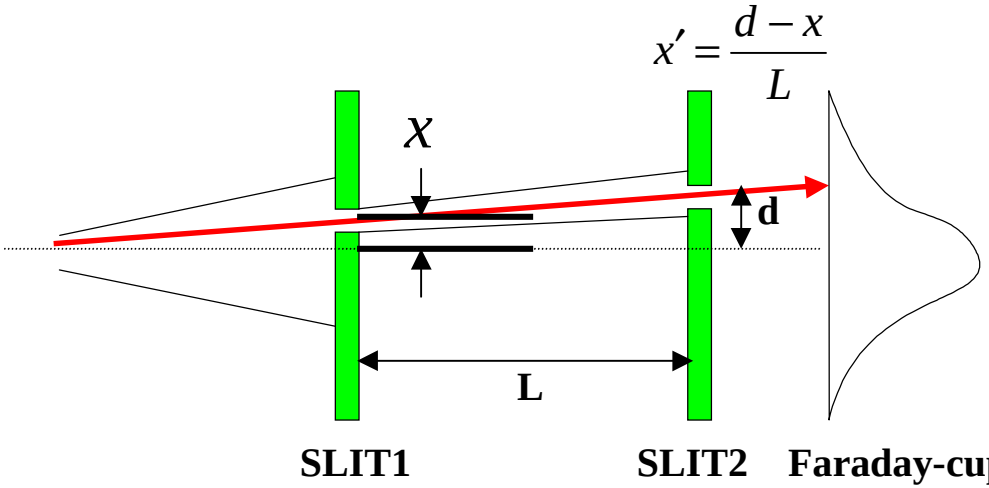
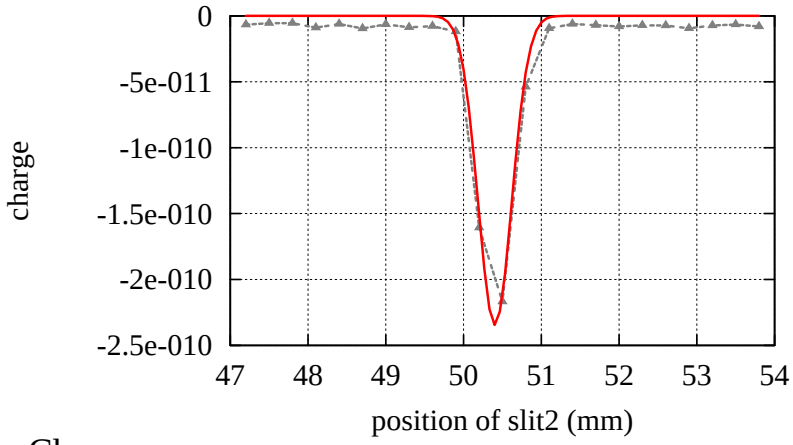
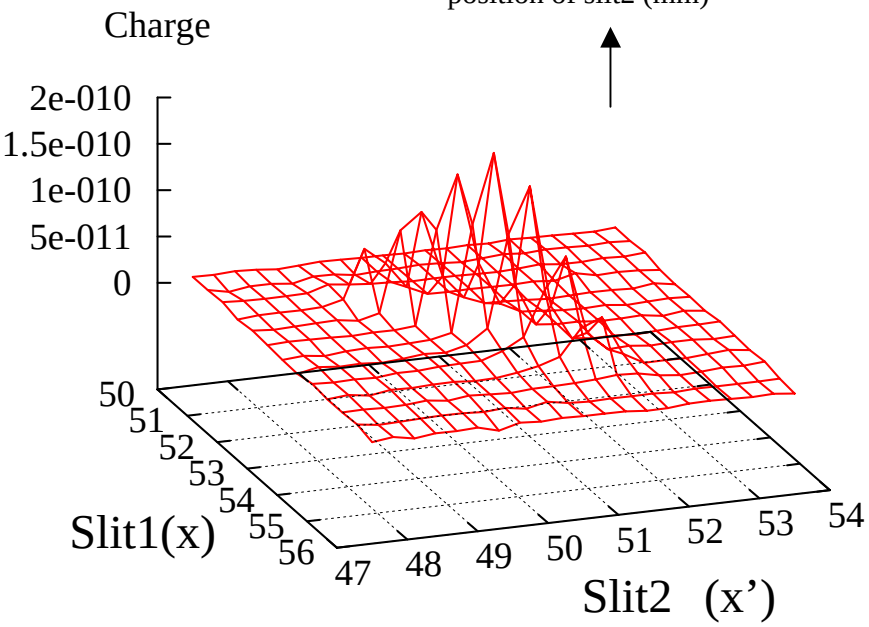
エミッタンス測定および算出方法







x	x'	Q
x_1	x'_1	Q_1
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
x_n	x'_n	Q_n

$$< x^2 >= \frac{\sum_i x_i^2 Q_i}{\sum_i Q_i}$$

$$< x'^2 >= \frac{\sum_i x_i'^2 Q_i}{\sum_i Q_i}$$

$$< x \cdot x' >= \frac{\sum_i x \cdot x' Q_i}{\sum_i Q_i}$$

エミッタンス

$$\varepsilon = < \gamma >< \beta > \sqrt{< x^2 >< x'^2 > - < x \cdot x' >}$$