Measurement of $W$ boson mass using the ratio method at D0

FENG GUO, SUNY–Stony Brook, D0 COLLABORATION — We measure the ratio of the $W$ and $Z$ boson mass using data collected in the DO Run II at Fermilab Tevatron collider. Our method uses scaled transverse mass spectrum $M_T$ of the $Z$ boson as templates. The $M_W/M_Z$ mass ratio is extracted by fitting to the templates. We will discuss the different corrections needed in this method and compare them with the standard method of $W$ mass measurement. Preliminary results of the measured $W$ boson mass and the uncertainties will be given.