## COLLISIONAL LINE BROADENING VERSUS COLLISIONAL DEPOLARIZATION: SIMILARITIES AND DIFFERENCES

S. Sahal-Bréchot<sup>1</sup> and V. Bommier<sup>2</sup>

 <sup>1</sup>Observatory of Paris, LERMA, CNRS-UMR 8112, 5 Place Jules Janssen, 92190 Meudon, France
<sup>2</sup>Observatory of Paris, LESIA, CNRS-UMR 8112, 5 Place Jules Janssen, 92190 Meudon, France

 $E\text{-}mail:\ sylvie.sahal\text{-}brechot@obspm.fr,\ v.bommier@obspm.fr$ 

Within the impact approximation, collisional line broadening parameters and depolarizing and polariza-tion transfer rates are complementary: both include the effect of collisional transitions between the Zeeman sublevels of a given level, or between fine or hyperfine structure levels of a given term. However, there are several dierences: in line broadening, the two levels connected by the radiative transition contribute to the broadening, and also an interference term, whereas only one level or two close levels are concerned in the depolarization. Another difference lies in the fact that purely elastic collisions contribute also to the line broadening, whereas they do not contribute to the depolarization. The nature of these two kinds of coefficients will be recalled at the Conference. Then we will discuss the possibility to find some relationships or systematic trends concerning depolarization versus collisional broadening. This is to answer some current questions which come from the polarization community.