1077-35-2678 **Kyungwoo Song*** (kyusong@khu.ac.kr), 1504 Belfer Hall, Yeshiva University, 2495 Amsterdam Ave., Manhattan, New York, NY 10033, and **Yuxi Zheng** (yzheng1@yu.edu), 519 Belfer Hall, Yeshiva University, 2495 Amsterdam Ave., Manhattan, New York, NY 10033. *A semi-hyperbolic* region for the pressure gradient system.

We consider solutions in regions including a semi-hyperbolic area in a self-similar plane. We give a talk on new results or developments on semi-hyperbolic patches using a pressure gradient system, which is a simple model of the two-dimensional compressible Euler system. (Received September 22, 2011)