

1108-35-56

Tao Huang* (txh35@psu.edu), Department of Mathematics, Penn State University, State College, PA 16802, and **Chun Liu** and **Yoichiro Mori**. *Dynamics of Ionic Electrodiffusion*.

We consider a dynamic system of ionic electrodiffusion which can be considered as a special case of cardiac bidomain model. A global weak solution has been constructed by Galerkin argument and maximum principle. The electroneutral limit as capacitance tends to zero is also considered. (Received December 17, 2014)