

Abstract Submitted  
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**Structure of the Stern layer in Phospholipid Systems**<sup>1</sup> SWETA VANGAVETI, Iowa State University, ALEX TRAVESSET, Iowa State University and Ames lab — The structure of the Stern layer in Phospholipid Systems results from a subtle competition of salt concentration, ionic valence, specific ionic-phospholipid interactions and pH. It becomes very challenging to develop a rigorous theory that encompasses all these effects, yet its understanding is extremely relevant for both model and biological systems, as the structure of the Stern layer determines the interactions of phospholipids with proteins or electrostatic phase separation (rafts). In this talk we will present our theoretical model for the Stern Layer and discuss how all these effects are included. Particularly emphasis is made to Phosphoinositides and Phosphatidic acid.

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