

Dear Editor,

Thank you for the opportunity to submit our manuscript, *Stochastic Block Models with Multiple Continuous Attributes*. In this work, we seek to adapt the classic stochastic block model for community detection to networks where each node has multiple continuous attributes. While there are a variety of community detection methods that have been adapted to consider node attributes, handling multiple continuous attributes with the stochastic block model is not well understood.

In this paper, we present our attributed stochastic block model and the associated inference technique for learning the model parameters. We also show that the attributed stochastic block model can be used for link prediction and collaborative filtering tasks. Finally, we fit and apply the attributed stochastic block model to link prediction and collaborative filtering tasks in two biological datasets.

This work provides a straightforward approach for modeling the interplay between attributes and connectivity information for the identification of communities. We believe that this work will be of interest to the network science community and to biologists and social scientists who work attributed network data.

Thank you for your consideration.

On behalf of all authors,

Natalie Stanley