Peer Review 3 for Sam

Temporal Latent Space Network Model with VAR 1 Evolution of Latent Positions: Introduction

Reviewer: Josue Orellana

1) General comments

This section is very dense in terms of equations. I would encourage you to include a brief description and summary for each section. That way the reader can be reminded of the direction of the argument. My first language is spanish, and I also struggle with the use of [a, the]. That would be an easy job for a native speaker.

2) Specific comments on section 3

L249, Equation 5, I see aligned equal signs in the lines before and then I'm surprised by an x.

L260, I could not find mu_z and Sigma_0 in the equations above, was I supposed to?

L270, This sentence is a little long. I would like to stop at the stress position "unless the covariance matrix is diagonal (Tong, 2012)". Consider removing: "representing a spherical distribution" or splitting the sentence at that point.

L275, [an/the] identifiable component of ...

L280, Should the sentence end at "time point in [a] Monte Carlo run"? Or you can start the sentence with: "Theorem 3.1 shows that the..."

L293: Some people are disturbed by the use of "iff" (from Goss, Hints on Mathematical style)

L300: Perhaps you might want to use "they are" instead of "they're".

L323-326, These are two sentences contrastes in one. How about if you make the 1st sentence: "Thus, the latent positions at the first time point ... for the identification of Phi". 2nd sentence: "However, the orientation of the positions on the orientation of the first one."

L327. The recipient of the transformation feels a little buried in this sentence. How about just: "We used Procrustes transformation to transform the first time point of the latent positions to a fixed target for each MCMC draw; this is an attempt to fix the rotational effect".

L341. ".. relating [the] true underlying relationship..."

L343. This paragraph "our goal in the estimation", gives me a sense of direction. Consider placing it at the beginning of the section.

L480,L490, You start both sentences with "Further"

L493: It would be helpful if you summarized this section here, similar to what you did for section 3.1 in line 323

L505: "there is a very less chance", how about: "there is a much lesser chance"

L513: same comment as in equation 5, the alignment of = and x is a bit distracting to me. Although perhaps it's just fine.