We have edited our manuscript, and we believe that we have addressed the two criticisms raised by the referee. Our responses to each critique are enumerated below.

Point 1: "In the introduction, the authors state that "Lagged cross-correlation techniques can be unreliable in the presence of strongly autocorrelated data [13], and partial directed coherence (which is related to lagged cross-correlation techniques) can lead to spurious conclusions given realistic data [14]. The results documented here show that the recently introduced CCM techniques have similar shortcomings."

Not sure that the authors have enough grounds to state that the shortcomings of CCM are due to strong autocorrelation in the data or some similar (which is again a vague term) problem. Since most of their examples are discrete system (except for the last example), it is difficult to conceive the manifestation of autocorrelation in discrete systems. Either authors should rephrase this sentence or provide enough evidence to support this statement."

Response 1: Our intention was not to imply that the shortcomings of CCM are related to autocorrelation in the data. We appreciate the referee's point that the use of the word "similar" may imply such a conclusion, so we have changed the final sentence of that paragraph to read as follows:

"The results documented here show that the recently introduced CCM techniques also has shortcomings; in particular, the CCM technique may lead to conclusions that do not agree with intuitive notions of causality."

Point 2: "It is not clear what the authors mean by 'realistic data'."

Response 2: The phrase "realistic" was taken from the immediately following reference in that sentence (i.e. reference 14). We appreciate that the phrase may be confusing, so the sentence has been changed as follows:

"Lagged cross-correlation techniques can be unreliable in the presence of strongly autocorrelated data [13], and partial directed coherence (which is related to lagged cross-correlation techniques) can lead to spurious conclusions given both simulated time series with known dynamics and empirical data [14]."

This sentence in our introduction refers to the conclusions made in reference 14. Parts of the abstract of that reference are shown below:

"...The three aims of this study are: (1) To show that the PDC can misrepresent the frequency response under plausible realistic conditions, thus defeating the main purpose for which the measure was developed; (2) To provide...To illustrate the severity of the problem with the PDC, and the solution achieved by the iCoh, three examples are given, based on: (1) Simulated time series with known dynamics; (2) Simulated cortical sources with known dynamics, used for generating EEG recordings, which are then used for estimating (with eLORETA) the source signals for the final connectivity assessment; and (3) EEG recordings in rats...."