

# ***Interactive comment on* “Objective functions for information-theoretical monitoring network design: what is optimal?” by Hossein Foroozand and Steven V. Weijs**

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Dear Editor,

We are grateful for being blessed with four reviewers providing detailed comments and suggestions. We have included extensive point by point replies to all four reviewers. We also have several concrete ideas how to benefit from the reviews to improve the clarity of the paper.

We noticed that some of the reviewers were not yet convinced by our key point about minimizing redundancy not being needed as an additional objective in monitoring net-

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work optimization. Perhaps this is not surprising as this goes against ideas brought forward in many published papers, and is therefore necessarily controversial.

As you can see for example from our replies to the most extensive comments and disagreement by reviewer 4, we firmly stand by our arguments and perhaps explain them more clearly in the replies.

We also want to clarify here that our main point is not that joint entropy is the only objective needed in any situation, which is an impression that may have risen with some of the reviewers. We merely argue that the only reason why high redundancy is not desirable, is the information loss it causes, which is already reflected in the maximization of joint entropy.

We hope that our extensive replies to the comments will perhaps convince the reviewers, and that incorporating the many useful comments will make our manuscript clearer.

Best regards, Hossein Foroozand and Steven Weijs

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