Anmeldung eines Themas für ein/e

Forschungsseminar   **X**
Methodenseminar   **X**
Masterarbeit   **X**   (bitte eines oder mehrere ankreuzen)

Thema Datum	Analyising the relation between Arctic Lapse rate feedback and meridional energy transport to the Arctic using deep Autoencoder
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Zweitgutachter	Johannes Quaas
Kurzbeschreibung:	The deep neural networks have shown great capabilities in capturing complex patterns[1,2]. Using deep Autoencoders[3], the possible relationship between meridional energy transport into the Arctic and Arctic Lapse rate feedback should be explored through using autoencoders on meridional energy transport fields. Then, the Arctic Lapse rate feedback information would be added to the Autoencoder´s latent space. This way a possible relationship between the two fields will be determined.
Literatur:	1- LeCun, Y., Bengio, Y. and Hinton, G., 2015. Deep learning. nature, 521(7553), 436-444, doi:10.1038/nature14539 1- Chollet, F., 2021. Deep learning with Python(Second edition.). Shelter Island, NY: Manning. 2- https://www.jeremyjordan.me/autoencoders/