**Evaluation: LSTM PINN NLL** 0.05 0.00 Truth -0.05Prediction 2017 2020 2018 2019 2021 2022 0.6 **Cumulative Truth Cumulative Prediction** 0.4 0.2 0.0 -0.2-0.42017 2018 2019 2020 2021 2022 0.35 HV60 Inferred Volatility 0.30 0.25 0.20 0.15 2017 2018 2019 2020 2021 2022 Remain Noise 0.05 0.00 -0.052017 2018 2019 2020 2021 2022