Collaborative real-time modelling during the COVID-19 pandemic

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and online via Zoom (Link)
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During the COVID-19 pandemic there has been a surge in research activity on real-time epidemic modelling, including nowcasting, estimation of reproductive numbers and short-term forecasting. This raises the need for systematic comparison and evaluation of methods, both as a prerequisite for model improvement and to assess how reliably these analyses can inform public health decision making. Moreover, the large number of available models opens new avenues for model combination and ensemble forecasting, as commonly used in fields like meteorology and economics. Supported by public pealth agencies like the US and European CDC, various modelling hubs have been established to facilitate these tasks and harness the multitude of available models. I will speak about challenges encountered and lessons learned during several collaborative projects I have been involved in, including the European COVID-19 Forecast Hub (https://covid19forecasthub.eu/) and the German COVID-19 Nowcast Hub (https://covid19nowcasthub.de/). Particular attention will be given to the topics of forecast evaluation and combination.

Biography:
Johannes Bracher obtained an MSc in Statistics from LMU Munich and a PhD in Biostatistics from the University of Zurich. Since 2020 he has been a postdoctoral researcher at Karlsruhe Institue of Technology (KIT) and Heidelberg Institute for Theoretical Studies (HITS). His research interests include real-time modelling of infectious diseases, probabilistic forecasting, neutral methods comparisons and count time series modelling. In 2023 he will establish a junior research group at KIT, supported by a DFG Emmy Noether grant.