Contribution ID: **10** Type: **Poster**

P1.75: Dark-field Radiography for Detection of Infectious Lung Diseases: COVID-19

Monday, 26 June 2023 16:06 (1 minute)

Dark-field chest radiography allows for assessment of lung alveolar structure by exploiting wave optical properties of x-rays. Here we present first results on the qualitative and quantitative characteristics of dark-field chest radiography in participants with COVID-19 pneumonia. Dark-field radiography shows high accuracy for the detection of COVID-19 and significantly improves diagnostic performance compared to conventional radiography.
In addition, we discuss how spectral information, e.g. from photon-counting detectors, could further improve these clinical darkfield results in the future.

Primary author: Prof. PFEIFFER, Daniela (Technical University of Munich)

Co-authors: FINGERLE, Alexander; SAUTER, Andreas; RENGER, Bernhard; GASSERT, Felix; GASSERT, Florian; PFEIFFER, Franz; BAST, Henriette; FRANK, Manuela; MAKOWSKI, Marcus; SCHICK, Rafael; URBAN, Theresa; KOEHLER, Thomas

Presenter: Prof. PFEIFFER, Daniela (Technical University of Munich)

Session Classification: Poster (incl. coffee)