Abstract Submitted
for the APR21 Meeting of
The American Physical Society

Detecting COVID-19 via Cherenkov Luminescence Imaging on a cellphone ARBAAZ MAHMOOD, Pakistan Science Club — COVID-19's rampant rise has had a chilling effect on mankind's daily regimen worldwide. Millions have been lost to the pandemic, tens of millions are infected, while billions are caught in a standstill by this dolorous state of affairs. Developing a fast, cheap and reliable testing method is the linchpin for eradicating this evil for good, which, we sadly don't have at the moment. Here, I propose a revolutionary new technology for clinical testing via Cherenkov Luminescence Imaging (CLI), using a smartphone, which, if implemented will accelerate our diagnostic work-flow by many orders of magnitude and in turn disease eradication. In the first half of the paper, it is tentatively proven, that CR can be detected using a mobile phone, while, in the latter half feasibility of CLI in clinic-grade diagnosis is discussed. Moreover, a proposal for further research required to practically use the technology, employing chromophores, fluorescence, and, CLI-CT for detection of diagnostically significant variables is developed. It hypothesized that those variables can be detected with reasonable accuracy and that, they can be of diagnostic value in detection of COVID.

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Date submitted: 11 Jan 2021 Electronic form version 1.4