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Dear Editors,

We resubmit our manuscript entitled "X-ray phase-contrast imaging at 100 keV on a conventional source" after the last round of revision. We address here the major concerns of Reviewer #3.

This reviewer asserts that this paper does not present a significant achievement in the field of X-ray imaging, and that the main problems in grating interferometry, namely dose and exposure time, are not addressed here.

In the response to the reviewer we point out that these challenges are important and have indeed been investigated and solved recently for systems with a lower energy range, with clinical tests ongoing in hospitals. However, most clinical and security applications cannot be performed without a sufficient penetration power of the X-rays, and voltages above 100 kVp are needed. Traditional face-on grating interferometers cannot reach this energy range, and we suggest that our arrangement is a way to overcome these technical limitations.

We are convinced that the revised manuscript as well as our extended response to Reviewer #3 address the issues raised and we are now really confident that you will find the manuscript suitable for publication on Scientific Reports.

Yours faithfully,

A handwritten signature in blue ink, consisting of stylized initials 'MS' followed by a horizontal line.

Prof. Marco Stampanoni
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