### Novel PET Imaging for Proton Therapy Applications

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#### Lab members and Collaborators

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Technical support

Proton Therapy Center at MD Anderson Cancer Center















![](_page_1_Figure_5.jpeg)

![](_page_2_Figure_0.jpeg)

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## 

![](_page_5_Figure_0.jpeg)

![](_page_5_Figure_1.jpeg)

"PET performance" and "Activity range" acquisitions

![](_page_5_Figure_3.jpeg)

![](_page_5_Figure_4.jpeg)

![](_page_6_Figure_0.jpeg)

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Data from monitoring-acquisition (Na-22 disk-source)																													
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![](_page_6_Figure_3.jpeg)

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![](_page_7_Figure_0.jpeg)

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![](_page_8_Figure_0.jpeg)

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![](_page_8_Figure_5.jpeg)

![](_page_9_Figure_0.jpeg)

![](_page_9_Figure_1.jpeg)

Count-depth distribution (direct projection data) In-beam data Post-beam data 12 e det tor view (0°) detector view (0°) 8.0 Normalized counts 0.8 0.6 Normal 0.4 0.2 0.2 1,211 0 170 0 175 180 185 180 185 190 Phantom depth (mm) 190 195 Phantom depth (mm)

![](_page_9_Figure_3.jpeg)

![](_page_9_Figure_4.jpeg)

![](_page_9_Figure_5.jpeg)

![](_page_10_Figure_0.jpeg)

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![](_page_10_Figure_5.jpeg)

![](_page_11_Picture_0.jpeg)

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![](_page_12_Picture_0.jpeg)

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# Thank you!

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