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1 Introduction

A digital x-ray imaging device consists of a source that emits x-ray photons and a detector that measures incident x-ray energy. Distinct materials in the object attenuate x-rays differently. In medical applications for example, the probability to absorb x-rays is higher for dense material such as bones and lower for soft tissue. One of the most common types of digital x-ray detectors, and the one we consider in this work, uses a scintillator to convert x-rays into visible light that can be detected by a regular digital photodetector. Due to the intermediate conversion of x-ray photons into light, these detectors are called indirect detectors.

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$$\alpha\beta\gamma\Lambda_0\mathbf{\Lambda}_0\Lambda_0\Lambda_0\mathbf{\Lambda}_0 abcdef \, 123456567890 \sum_{i=0}^{\inf} \left(\begin{bmatrix} 1 & 2 \\ \alpha & \mathbf{b} \end{bmatrix} \right) \tag{1.1}$$

$$\mathbb{R} \tag{1.2}$$