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Medida y caracterización del patrón de granulación en el IAG Solar Flux Atlas

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XPCI exploits a property different from the well-known attenuation[3]; this property refers to the **phase**. To understand it, we introduce the concept of a **complex refractive index**:

$$n = 1 - \delta + i\beta \tag{1}$$

Here, β represents the attenuation effects, while δ accounts for the phase effects[4]. In soft tissue, this difference is about three orders of magnitude.

Overall Progress

The overall progress of the project has been:

- Identify the key setup parameters required for effective Edge Illumination (EI) (70%).
- Develop an open-source code for phase retrieval using EI (100%).
- Perform computational simulations with PEPI to evaluate spatial resolution and contrast for various clinical X-ray setups (20%).
- Conduct experimental studies with clinical setups and medical phantoms to validate the computational results (0%).

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