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Simple Yet Novel Dismantlement Confirmation Instrument

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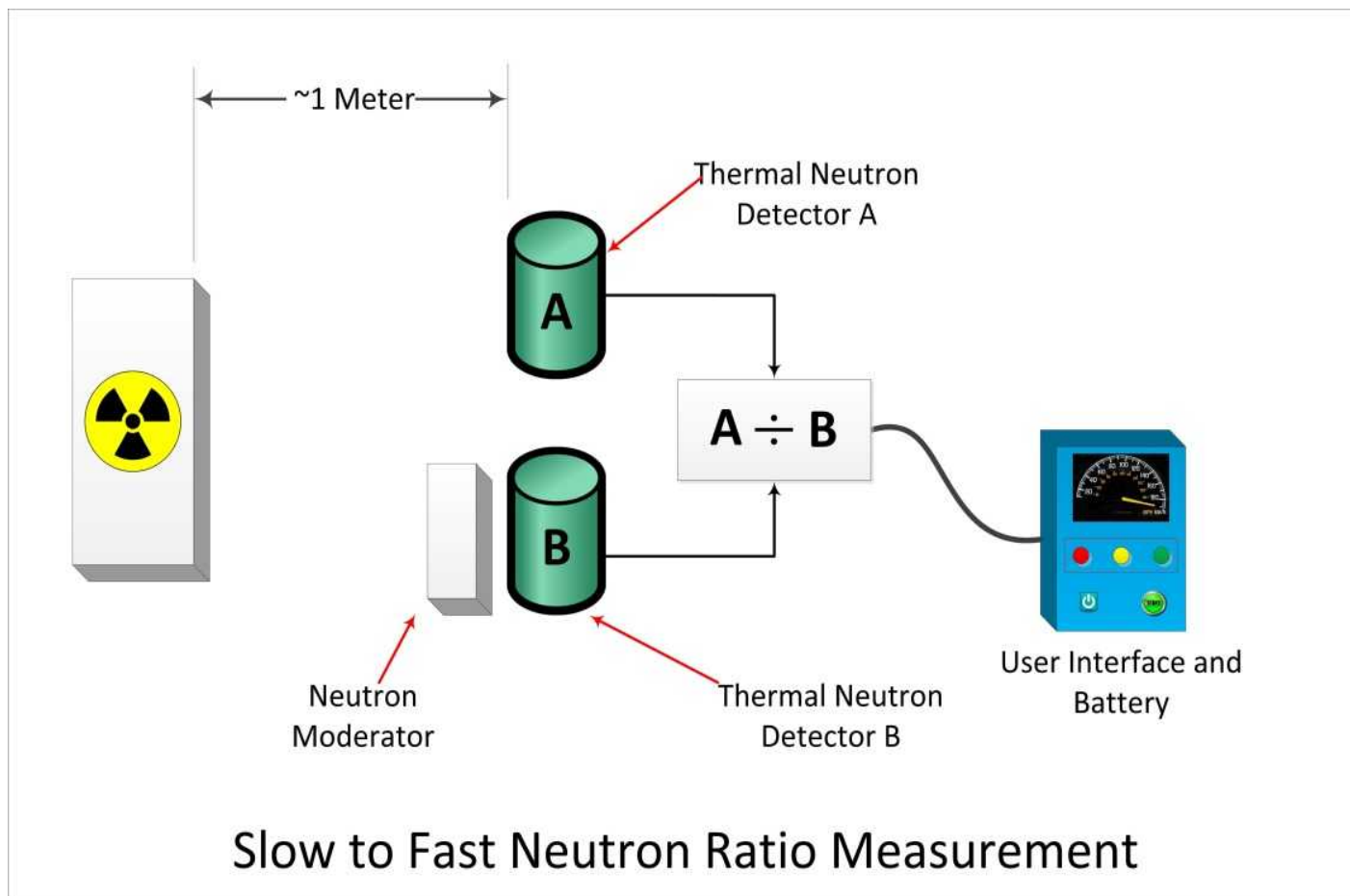
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Problem Statement

- Generally accepted definition of dismantlement: separation of High Explosives (HE) from the Fissile Material (FM)
- Objective:
 - Provide measurement to confirm separation of HE and FM
 - Authenticatable
 - Certifiable

Concept



A moderated object (FM +HE) will have a slow-to fast ratio that is higher than an unmoderated object (FM only). This phenomena can be used to determine if the HE has been removed.

Discussion

- Are there design/implementation choices that would make this concept more (or less) authenticatable or certifiable?
- This instrument would operate within a larger regime. How would this instrument, combined with other elements (e.g, chain of custody) provide confidence?