1172-16-307 **Soumyadip Acharyya*** (acharyya@mailbox.sc.edu), **Sudip Kumar Acharyya**, **Atasi Debray** and **Rakesh Bharati**. *An Isomorphism problem involving rings and subrings of measurable functions.*

Let $(X, \mathcal{A})$ stand for a nonempty set X equipped with a σ-algebra $\mathcal{A}$ over X. Let $\mathcal{M}(X, \mathcal{A})$ be the set of all real-valued $\mathcal{A}$-measurable functions on X, which forms a commutative lattice ordered ring with unity if the relevant operations are defined pointwise. $\mathcal{M}_c(X, \mathcal{A})$ stands for the subring of $\mathcal{M}(X, \mathcal{A})$ consisting of those functions that have countable range in $\mathbb{R}$. This talk will focus on separated realcompact measurable spaces and how an isomorphism problem involving $\mathcal{M}(X, \mathcal{A})$ is related to a similar isomorphism problem involving $\mathcal{M}_c(X, \mathcal{A})$ within that class of measurable spaces. This involves the discussion of a measure-theoretic analogue of the celebrated Hewitt's isomorphism theorem in rings of continuous functions. (Received August 31, 2021)