Title : Tensor t-str and w-str on the derived category of the scheme

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Abstract : The Hopkins-Neeman classification of thick subcategories of the derived category of rings was extended to the non-affine situation by Thomason using the tensor product structure. In joint work with Gopinath Sahoo, we introduce the Thomason style tensor compatibility for truncation structures (t-str) and classify the compactly generated tensor t-structures on the derived category of noetherian schemes. The notion of t-str was introduced in the famous paper of Beilinson, Bernstein, and Deligne (Gabber). As an application, we also classify the tensor-compatible weight structures (w-str or co-t-str) on these derived categories. The w-str was introduced by Bondarko and can be thought of as dual to the t-str. We also gave an explicit classification of bounded w-str for the projective line.

Venue : Online & Emmy Noether Seminar Room (ICTS)
Zoom link: https://icts-res-in.zoom.us/j/86374138667?pwd=UjlpclVDWHZ4aGlWTTFXT0tHTnRXZz09
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