A characterization of regular Alster spaces via filter bases

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Assuming CH, the Alster property characterizes productively Lindelöf spaces with weight at most $omega_1$. On the other hand, totally Lindelöf spaces were defined by Vaughan to unify the proof that countable products of P-Lindelöf spaces and sigma-compact spaces are Lindelöf. Noble proved that every regular totally Lindelöf space is Alster and asked whether the converse is false. We shall present a proof that every Alster (not necessarily regular) space is totally L indelöf. This together with Noble's result characterizes regular Alster spaces. This is joint work with Guilherme Pinto and Vinicius Rocha.
(joint work with Guilherme Pinto and Vinicius Rocha)