

Separable Scarborough-Stone

PAUL SZEPTYCKI*

York University
szeptyck@yorku.ca

The Scarborough-Stone problem asks whether the product of any family of sequentially compact spaces is countably compact, equivalently whether every sequentially compact space has every power countably compact. We consider the weaker problem whether every *separable* sequentially compact space has all powers countably compact. We present several consistent counterexamples and a partial consistent positive answer: Assuming $\text{MA} + \neg CH$ every separable sequentially compact space *of size continuum* has all powers countably compact.

*This is joint work with Cesar Corral and Alan Dow.