James Belk Embeddings into Topological Full Groups

The Boone-Higman conjecture asserts that every countable group with solvable word problem embeds into a finitely presented simple group. In this talk, I will survey some recent progress on this conjecture using embeddings into topological full groups of certain étale groupoids. The resulting finitely presented simple groups can be viewed as generalisations of Thompson's group V. This is joint work with Collin Bleak, James Hyde, Francesco Matucci, and Matthew Zaremsky.