Special volume dedicated to Ronald Brown for his 80th birthday

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This volume of Journal of Homotopy and Related Structures is dedicated to Professor Ronald Brown on the occasion of his 80th birthday, in appreciation of his so distinguished and beautiful contribution to algebraic topology, homotopical algebra, and related areas of mathematics.

Ronnie's research begins with several diverse topics of topology and homological algebra, including the study of product topologies and what would later be described as monoidal closed structures on the category of topological spaces, then Künneth relations, the homotopy theory of fibrations, and the sequential approach to topology, to mention only a few. His later work included developing computational methods for perturbing a homotopy type, and already in 1967, he showed the advantages in using

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groupoids in proofs of variants of van Kampen's theorem. His first book, published in 1967, introduced both categorical arguments and groupoid theory as algebra to many topologists. In 1970, he moved from Hull to Bangor and later in the 1970s started his very fruitful collaboration with Philip J. Higgins. In this collaboration, and in collaboration with many others, as well as just by himself, we find work on topological groupoids, crossed modules, then ω -groupoids and higher-dimensional algebra, together with applications of these to combinatorial and cohomological group theory which have all been studied in the process, pushing forward into unknown mathematical territory.

We would also like to mention his well-documented exchanges that resulted in Grothendieck's *Pursuing Stacks* that typifies the innovative way that Ronnie reacts to new situations. He has had a very wide influence in all of the areas in which he has worked, and has been generous with his help and advice to the mathematical community.

We thank Hvedri Inassaridze and all the editors of JHRS for giving us the opportunity to publish this volume, and we join with the authors to offer Ronnie these articles to celebrate his 80th birthday, even if his 81st has now passed!

Maria Manuel Clementino, Marino Gran, George Janelidze, Timothy Porter

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List of Publications of Ronald Brown

DPhil Thesis: 'Some problems in algebraic topology: a study of function space, function complexes, and FD-complexes', 1961, 140 pages, (Supervised by M. G. Barratt).

Books

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