Proceedings of the Conference on Quadratic Forms and Their Applications July 5–9, 1999, University College Dublin Editors: Eva Bayer-Fluckiger, David Lewis, Andrew Ranicki AMS Contemporary Mathematics 272 (2000) Galois cohomology of the classical groups EVA BAYER-FLUCKIGER Symplectic lattices Anne-Marie Bergé Universal quadratic forms and the Fifteen Theorem J.H. CONWAY On the Conway-Schneeberger Fifteen Theorem MANJUL BHARGAVA On trace forms and the Burnside ring MARTIN EPKENHANS Equivariant Brauer groups A. FRÖHLICH AND C.T.C. WALL Isotropy of quadratic forms and field invariants Detlev W. Hoffmann Quadratic forms with absolutely maximal splitting OLEG IZHBOLDIN AND ALEXANDER VISHIK 2-regularity and reversibility of quadratic mappings ALEXEY F. IZMAILOV Quadratic forms in knot theory C. KEARTON Biography of Ernst Witt (1911–1991) INA KERSTEN Generic splitting towers and generic splitting preparation of quadratic forms MANFRED KNEBUSCH AND ULF REHMANN Local densities of hermitian forms MAURICE MISCHLER Notes towards a constructive proof of Hilbert's theorem on ternary quartics VICTORIA POWERS AND BRUCE REZNICK On the history of the algebraic theory of quadratic forms WINFRIED SCHARLAU Local fundamental classes derived from higher K-groups: III VICTOR P. SNAITH Hilbert's theorem on positive ternary quartics RICHARD G. SWAN Quadratic forms and normal surface singularities C.T.C. WALL