ON GROTHENDIECK–WITT THEORY OF THE INTEGERS

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We introduce the Grothendieck–Witt groups of the integers and the Grothendieck–Witt spectrum of the integers. Then we explain how to compute these groups and the homotopy type of the spectrum using recent work on K-theory and L-theory. If time permits we also explain how to resolve the homotopy limit problem for rings of integers in number fields and prove Karoubi's periodicity conjecure for arbitrary rings.