

Cyclotomic Root Systems

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We generalize the definition and properties of root systems to complex reflection groups—roots become rank one projective modules over the ring of integers of a number field k . In the irreducible case, we provide a classification of root systems over the field of definition k of the reflection representation. In the case of special reflection groups, we generalize as well the definition and properties of bad primes.

This is joint work with Michel Broué and Ruth Corran.

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