

## 4. Lattice periodicity

### 4.1 Intro

→ transparencies

O operation:  $a, b \in G, a \oplus b = c$  with  $c \in G$

A associate:  $a \oplus (b \oplus c) = (a \oplus b) \oplus c$

N neutral:  $a \oplus E = E \oplus a = a$

I inverse:  $a \oplus a^{-1} = a^{-1} \oplus a = E$

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C commutative:  $a \oplus b = b \oplus a$

### 4.2 Bloch theorem.