

Unitary group of order six $U(6)$ having three sub groups.

Type 1. $U(6) \supset U(5) \supset O(5) \supset O(3) \supset O(2)$

Type 2. $U(6) \supset SU(3) \supset O(3) \supset O(2)$

Type 3. $U(6) \supset O(6) \supset O(5) \supset O(3) \supset O(2)$

How these chains are produced.