

# 3x3x3

## Two Phases OLL

### Orient edges



F (U R U' R') F' "Vlad"



F (R U R' U') F' "Troll"

### Orient corners



R U R' U R U2 R' "Sune"



R U2 R' U' R U' R "Anti-Sune"



R U2 R' U' R U R' U' R U R' U' R U' R'



R2 D R' U2 R D' R' U2 R'



R



R U R' U R U' R' U R U2 R'



R U2 R2 U' R2 U' R2 U2 R

## PLL



(R2 U2 R2 U2) R2 U (R2 U2 R2 U2) R2 U' "U"



(R2 U2 R2 U2) R2 U (R2 U2 R2 U2) R2 U' "H"



(R' U2 R) U z D' (R2 U)(R' D R U') "Ja"



R U R' F' R U R' U' R' F R2 U' R' U' "Jb"



x' R U' R D2 R' U R D2 R2 "T"



M2 U M2 U M U2 M2 U2 M U2 "Z"



R' U' F' (R U R' U') R' F R2 U' (R' U' R U) R' U R "F"



R U2 R' D (R U' R U') R U R2 D R' U' R D2 "V"



F (R U' R' U' R U) R' F' (R U R' U') R' F R F' "Y"



R' U2 R U2 R' F (R U R' U') R' F' R2 U' "Rb"



R U R' F' R U2 R' U2 R' F R U R U2 R' U' "Ra"



R U R' y' R2 u' (R U' R' U) R' u R2 "Gd"



R' U' R y R2 u (R' U R U') R u' R2 "Gb"



R2 u' (R U' R U) R' u R2 y R U' R' "Gc"



R2 u (R' U R' U') R u' R2 y' R' U R "Ga"



x R' U R' D2 R U' R' D2 R2 "Aa"



x' R U' R D2 R' U R D2 R2 "Ab"



R U R' U R U R' F' R U R' U' R' F R2 U' R' U2 R U' R' "Na"



R' U R U' R' F' U' F R U R' F R' F' R U' R "Nb"



x' R U' R' D R U R' D' R U R' D R U' R' D' "E"

## Figure



F L F U' R U F2 L2 U' L' B D' B' L2 U



U' L' U' F' R2 B' R F U B2 U B' L U' F U R F'



F D2 B R B' L' F D' L2 F2 R F' R' F2 L' F

## 3x3x5 C4Y



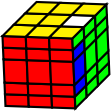
R2 U R2 U' R2 U' D R2 U' R2 U R2 D'



R2 U R2 U R2 U2 R2 U2 R2 U R2 U' R2



R2 U2 R2 U2 R2



U2 R2 F2 U2 u2 F2 R2 U2 F2 (Parity)

## Megaminx

### Spins edge

(RL') U' L U2 R' U'2 L' U L U R U' R (trigo direction)

(RL') U R' U'2 L U2 R U R' U' L' U L (time direction)

a