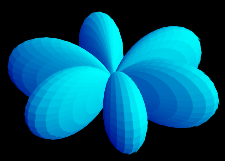
Atomic f–orbitals

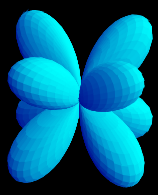
l = 3, m = ±3



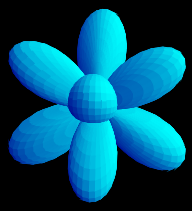
$f_{x(x^2-3y^2)}$

$f_{y(3x^2-y^2)}$

l = 3, m = ±2



f_{xyz}



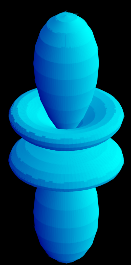
$f_{z(x^2-y^2)}$

l = 3, m = ±1

$f_{x(5z^2-r^2)}$ (f_{xz^2})

$f_{y(5z^2-r^2)}$ (f_{yz^2})

l = 3, m = 0



$f_{z(5z^2-3r^2)}$ (f_{z^3})

Atomic f–orbitals

l = 3, m = ±3

$f_{x(x^2-3y^2)}$

$f_{y(3x^2-y^2)}$

l = 3, m = ±2

f_{xyz}

$f_{z(x^2-y^2)}$

l = 3, m = ±1

$f_{x(5z^2-r^2)}$ (f_{xz^2})

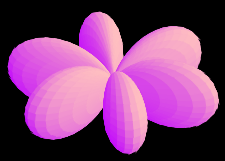
$f_{y(5z^2-r^2)}$ (f_{yz^2})

l = 3, m = 0

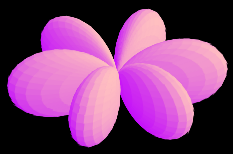
$f_{z(5z^2-3r^2)}$ (f_{z^3})

Atomic f–orbitals

l = 3, m = ±3

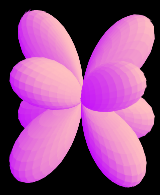


$f_{x(x^2-3y^2)}$

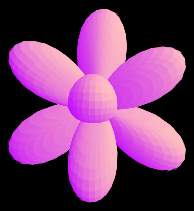


$f_{y(3x^2-y^2)}$

l = 3, m = ±2



f_{xyz}



$f_{z(x^2-y^2)}$

l = 3, m = ±1

$f_{x(5z^2-r^2)}$ (f_{xz^2})

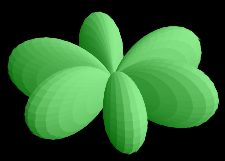
$f_{y(5z^2-r^2)}$ (f_{yz^2})

l = 3, m = 0

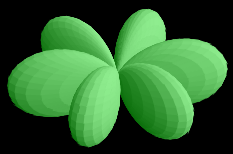
$f_{z(5z^2-3r^2)}$ (f_{z^3})

Atomic f–orbitals

l = 3, m = ±3



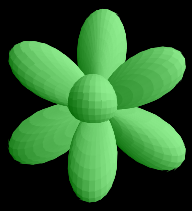
$f_{x(x^2-3y^2)}$



$f_{y(3x^2-y^2)}$

l = 3, m = ±2

f_{xyz}



$f_{z(x^2-y^2)}$

l = 3, m = ±1

$f_{x(5z^2-r^2)}$ (f_{xz^2})

$f_{y(5z^2-r^2)}$ (f_{yz^2})

l = 3, m = 0

$f_{z(5z^2-3r^2)}$ (f_{z^3})