



Center for Molecular Modeling

Computational Materials Physics



Department of Materials Science and Engineering

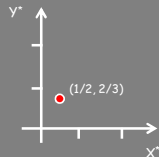
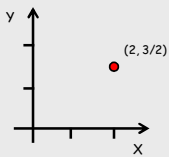
reciprocal space

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<http://molmod.ugent.be>
<http://www.ugent.be/ea/dmse/en>
my talks on Youtube: <http://goo.gl/P2b1Hs>

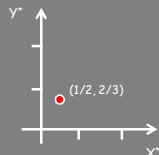
Reciprocal space

(We'll work in 2D, yet keep 3D in mind.)



Reciprocal space

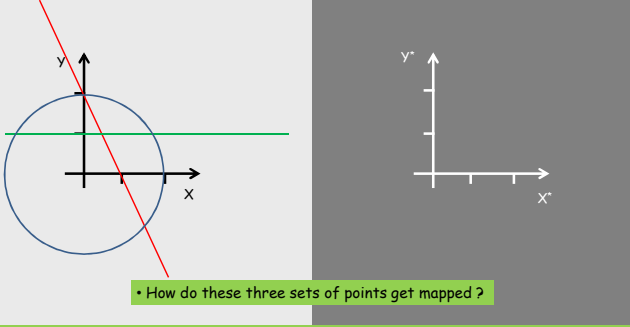
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- $(x, y) \rightarrow (1/x, 1/y)$
- Unit = distance \Leftrightarrow unit = 1/distance
- Far-away points mapped close to the origin, and vice-versa

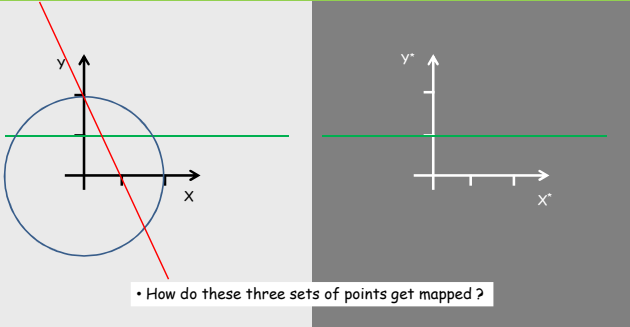
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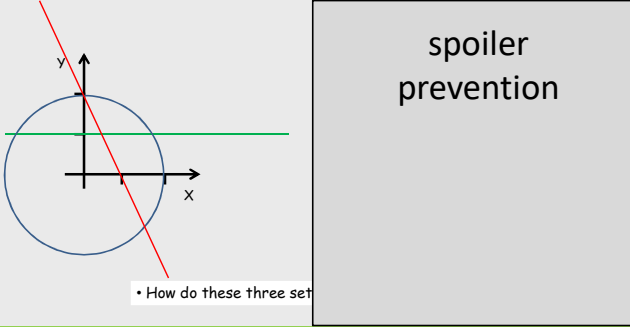
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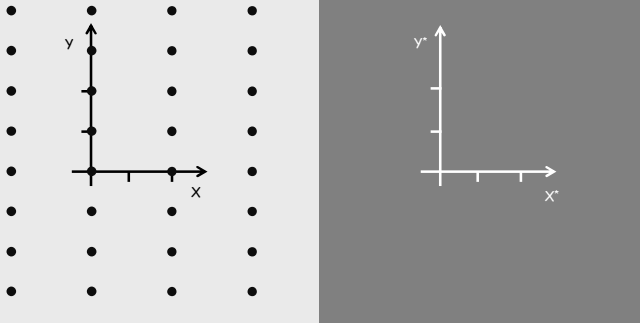
Reciprocal space

(We'll work in 2D, yet keep 3D in mind.)



Reciprocal space

Take our familiar "orthorhombic" Bravais lattice. How will this get mapped ?



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