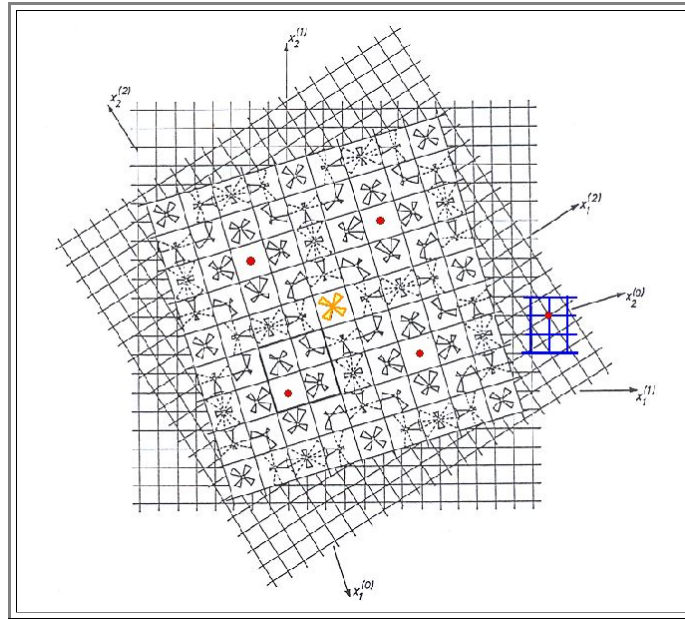


## Original "Pattern Drawing" from Bollmanns Book

### Illustration

This is a drawing from Bollmanns book (with some color added). It shows the pattern in **O**-lattice cells [as defined](#) in the backbone text.

- This drawing probably had to be done by hand with a high precision - some work! Most of the other pictures in Bollmanns book are rather complicated too, and this explains why they are so poorly described in the captions and the text:
- After conceiving and finishing a picture like this, you are so intimately familiar with everything it contains - you can't imagine that others are not immediately aware of everything it projects!
- What exactly are the dashed lines in some of the pattern elements? It is not explained anywhere - can you figure it out?



This is an **O**-lattice belonging to a **CSL** lattice, i.e. a special **O**-lattice with a periodic structure;  $\Sigma = 53$  in this case. One of the pattern elements was marked yellow.

- The red points are *coincidence points* of the lattices (i.e. the coinciding equivalence points are lattice points), they constitute the **CSL lattice**.
- This is shown by drawing in one more **O**-point on the outside of the picture with one lattice marked in blue. It is evident that there is indeed a coincidence of the lattice points.
- Note that all points in the center of the cells containing patterns are **O**-points, too. The **O**-lattice thus has a much smaller lattice constant than the **CSL** lattice.