Solving organic Structures from Powder Diffraction: News from the FOX

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FOX, "Free Objects for Xtallography" [1][2] is a program for *ab initio* crystal structure solution using direct-space methods. While it was first developped and used to solve inorganic structures (oxides, intermetallic, hydrides), the algorithms used were not dedicated to any type of compound and organic structures could also be solved.

Over the last two years many modifications have been brought to the algorithm (mostly through a restraint-based description rather than a z-matrix one), to allow a better, more flexible description of molecular compounds.

We will present how the evolution of the algorithm has improved the ability to solve organic structures, along with new Fox features (multiple solutions, maximum likelihood,...).

[1] Favre-Nicolin V., Černý, R., *J. Appl. Cryst.,* 2002, **35**, 734. [2]Favre-Nicolin V.,Černý R., *Z. Kristallogr.*, 2004, **219**, 847.

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