

Publication

Recent advances in the CRANK software suite for experimental phasing

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**ID** 4530980**Author(s)** Pannu, Navraj S.; Waterreus, Willem Jan; Skubák, Pavol; Sikharulidze, Irakli; Abrahams, Jan Pieter; de Graaff, Rudolf A. G.**Author(s) at UniBasel** [Abrahams, Jan Pieter](#) ;**Year** 2011**Title** Recent advances in the CRANK software suite for experimental phasing**Journal** Acta Crystallographica. Section D, Biological Crystallography**Volume** 67**Number** Pt 4**Pages / Article-Number** 331-7**Mesh terms** Algorithms; Electronic Data Processing, methods; Internet; Software Design

For its first release in 2004, CRANK was shown to effectively detect and phase anomalous scatterers from single-wavelength anomalous diffraction data. Since then, CRANK has been significantly improved and many more structures can be built automatically with single- or multiple-wavelength anomalous diffraction or single isomorphous replacement with anomalous scattering data. Here, the new algorithms that have been developed that have led to these substantial improvements are discussed and CRANK's performance on over 100 real data sets is shown. The latest version of CRANK is freely available for download at <http://www.bfsc.leidenuniv.nl/software/crank/> and from CCP4 (<http://www.ccp4.ac.uk/>).

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