

**MOLECULAR STRUCTURE AND FUNCTION PROGRAM, SICKKIDS
&
BHT CRYSTALLOGRAPHIC ORGANIZATION SPECIAL SEMINAR**

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**MOLECULAR BIOLOGY INSTITUTE OF BARCELONA
SPANISH RESEARCH COUNCIL, SPAIN**



FRAGMENTS IN STRUCTURE INTERPRETATION: LOCAL FOLDS

Macromolecular crystallography provides conclusive structural information down to atomic detail and has been inextricable from major advances in the natural sciences. Our group has developed structural methods to exploit the stereochemical knowledge present in small, yet very accurate, structural units such as secondary structure fragments and their association into local folds. Their use to solve the central problem of crystallography, the phase problem, is implemented in our software ARCIMBOLDO. This has required developing our own particular toolbox for the very detailed view required in phasing, which can be extended to the solution of other problems. In particular, we are also extending this view to map interpretation in autotracing and general structure interpretation. As illustrated in the painting by Giuseppe Arcimboldo, the information content derived from a correct combination of fragments goes beyond their simple addition.

HOSTS: DRs. JEAN-PHILIPPE JULIEN & JEFF LEE

THURSDAY NOVEMBER 3, 2016

2:00-3:00 PM

MSB 2170 (MEDICAL SCIENCES BUILDING)

UNIVERSITY OF TORONTO, 1 KING'S COLLEGE CIRCLE

