THE MACROMOLECULAR CRYSTALLOGRAPHY WIGGLER BEAMLINE AT THE BRAZILIAN SYNCHROTRON LIGHT LABORATORY

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Macromolecular crystallography (MX) is a powerful method for obtaining detailed three-dimensional structural information about biological macromolecules. MX using synchrotron sources has contributed, significantly, to both fundamental and applied research, including the structure-based design of drugs to combat important diseases. The Brazilian Synchrotron Light Laboratory (LNLS) have two beam lines dedicated to protein crystallography, one of them recently open to users. W01B-MX2 beam line is the first LNLS beam line based on an insertion device and allows the application of the multi-wavelength anomalous diffraction (MAD) technique, currently the most advanced method in protein structure determination. The LNLS facilities will be presented and the first results obtained at MX2 beam line will be shown.