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Report for the 6 shifts (proposal n°30.01776) for 2006:

The refinement of the *Escherichia coli* SelB mRNA binding domain in complex with SECIS mRNA hairpin is finished (2.3 Ang; Rfree 27.5%).

We have collected several data sets on crystals of the *M. thermoacetica* SelB mRNA binding domain in complex with SECIS mRNA hairpin up to 2.6 Ang. The structure was solved by molecular replacement using our previous structure of the complex from *M. thermoacetica*. The refinement of the structure of the complex is almost finished (2.6 Ang; Rfree 28%).

Crystals of the methyltransferase RlmAII diffracted to 2.6 Å which is an improvement compare to the last experiment. We have collected data on native, heavy metals and RlmA<sup>II</sup> containing selenomethionine. Most crystals are pseudomerohedrally twinned. The analysis is difficult and still in progress.