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A new method in docking for rotatable OH bonds of amino acids in active sites

Angela Rumpl*1, Holger Claußen2 and Carsten Detering2

Address: ¹FH Hagenberg, Softwarepark 11, 4232 Hagenberg, Austria and ²BioSolveIT GmbH, An der Ziegelei 75, 53757 Sankt Augustin, Germany * Corresponding author

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We present a new concept in FlexX that determines torsion angles for OH-groups on the receptor side. For the affected amino acids SER, THR, and TYR, hydrogen bonds to neighbouring residues and the ligand are taken into account, providing a more realistic representation of the binding site. This is done irrespective of the ligand type, and without the user's interaction.

We present the concept itself as well as some case studies as early proof-of-concept.