**Co-inductive Logic Programming and its Application to Boolean SAT**

Co-induction logic programming extended with negation has many applications in Answer set programming. As we studied earlier the co-inductive logic programming solves many problems of infinite processes. But still there exists many problems, co-induction with negation results in many more applications.

Before talking about Co-inductive SDNF let us talk about Co-inductive SLD resolution, SLD resolution extended with the co-inductive hypothesis is known as CO-SLD resolution. CO-SLD resolution extended with the negation is known as CO-SLDNF resolution.

Co-inductive ASP solver mentioned in the paper has the following advantages of,

It works with ASP containing First order predicates with no restrictions placed on it.

It eliminates preprocessing.

It directly executes the predicates.

Finally, in this paper the author showed how co-SLDN resolution is used to develop Boolean sat

Solvers. Also goal-directed execution mechanisms are possible through co-SLDN resolution.