NPTEL
NPTEL ONLINE COURSE
Discrete Mathematics Relations
Condition for relation to be antisymmetric
With
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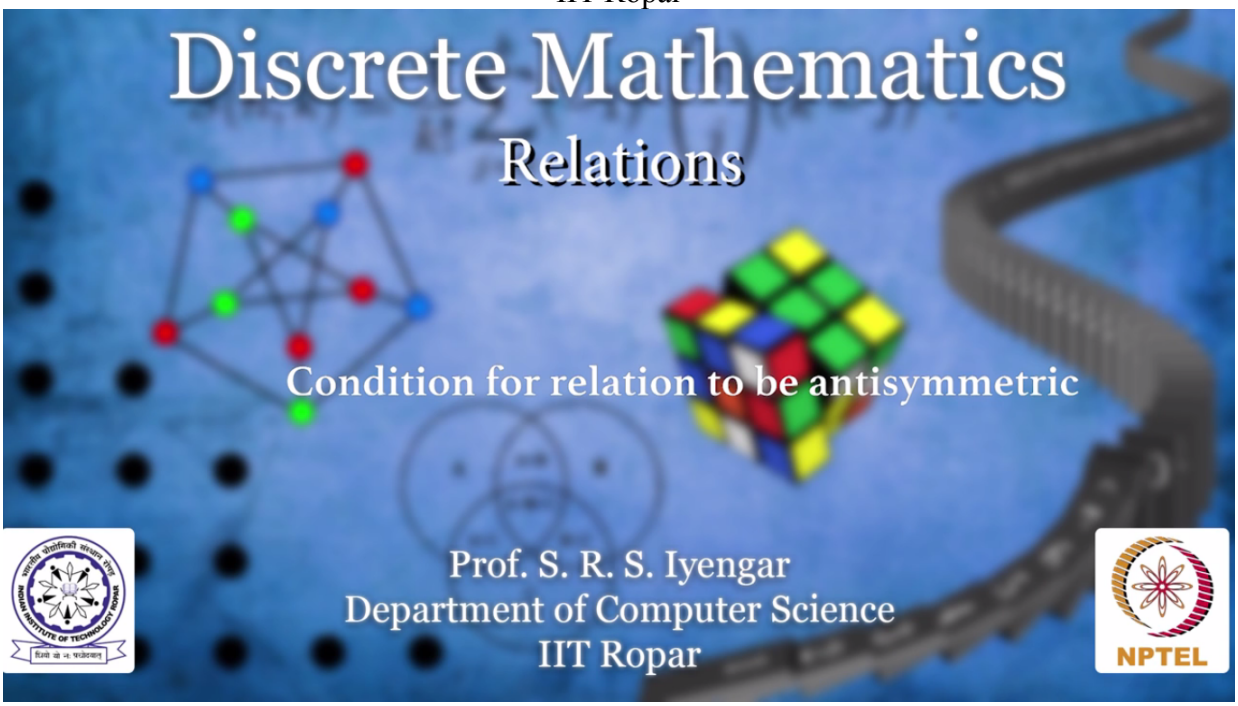

We have been looking at the same question of given a matrix M, how do you say if it's reflexive or not, how do you say if it is symmetric or not. Now we'll ask this question, how do you say that it is antisymmetric or not. What is given to you, the matrix M, you are supposed to tell me whether the matrix corresponds to an antisymmetric relation or not. How do you say that?
So let me now tell you this, you figure it out, it's quite obvious and straightforward.
So did you figure out? All right, I'll tell you the answer, you just verify whether I am right or wrong. You can check if the matrix M is antisymmetric or not just by checking if $M \cap M^{Tr} \leq I$.

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