

Cal Poly Department of Mathematics

Puzzle of the Week

April 9-15, 2010

20 prisoners are made to stand in a line, all facing forward and none allowed to look behind himself. The evil warden places a hat on each prisoner and all the hats are either red or black. Beginning with the last person in line (who can see the 19 people ahead of him) and moving person by person to the front, the warden will ask each what color hat he has on his own head. Those who are wrong will be executed.

Devise a strategy for the prisoners which will guarantee the safety of as many as possible.

Solutions should be submitted to Morgan Sherman:

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before next Friday. Those with correct and complete solutions will have their names listed in next week's email announcement. Anybody is welcome to make a submission.