

Better baseball -- Choosing the champs

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How many games does it take to ensure that the best team in a sports league ends up with the best record? According to a study by a pair of physicists at the Los Alamos national Laboratory in New Mexico, the answer is an astounding 256 games per team in the case of baseball's National League, well beyond the 162 games each team currently plays in the regular season.

According to the physicists' analysis and simulations of league play, there is always at least some chance that a lesser team can prevail in any given game. The randomness of outcomes means that it takes a large number of games to guarantee that the best team accumulates the most wins.

Specifically, it requires that the total number of games played in a season should be roughly the cube of the number of teams involved. For the 16 team National League, that means 4096 regular season games altogether and 2744 games for the 14 team American League.

Some fans might prefer things the way they are, with underdogs like the 2003 Florida Marlins having a shot at winning the World Series. For those who would rather the title only go to the very best team in any given year, a modified schedule could get the job done with many fewer games, according to the physicists.

By adding a preliminary round to the season, and eliminating the weakest teams before regular league play begins, the physicists showed that the best team in the National League would be virtually guaranteed to be

among the top two or three teams with the best records, even with a significantly reduced number of games. Although the very best team may not always end up in the lead, a preliminary round or two would at least ensure that the top teams aren't eliminated from the playoffs through simple bad luck.

Although the baseball schedule is far from perfect, according to the new research, author Ben-Naim points out that the relatively large number of games that the teams play each year results in better sorting than occurs in professional football, hockey, and basketball. The National Football League, for example has comparable numbers of teams to Major League Baseball, but plays far fewer games each year, which makes the pro football season outcome much more random.

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