

Performance analysis when the score difference wrt the opponent is between -4 and +4 points

Figure 5: These graphs are obtained by analyzing the data deriving from the play-by-play records of all the matches played during the Italian "Serie A2" Championship 2015/2016 (that constitutes the second-tier of the Italian league pyramid, just below the first division "Serie A", and is the highest Italian non-professional competition level). The datasets are obtained by extracting, from play-by-play data, all the attempted shots, described according to all the information that can be extrapolated from such data (e.g. the player, the time, the shot clock, the score, ...). This Figure investigates teams' shooting performance, computed averaging over each team's players (top panels: 2-point shots, middle panels: 3-point shots, bottom panels: free throws; left panels: first 15 matches of the championship, right panels: second 15 matches), when the score difference with respect to the opponent is in the range [-4,+4].

Each team is represented as a bubble with the size proportional to the total number of attempted shots. Each bubble is located in the plane with 2-point shot performance on the x-axis and 3-point shot performance on the y-axis. The color represents the performance on free throws, according to the blue-red scale reported in the graph. Such performance measures are related to the players' scoring probability and the circumstances under which each shot has been attempted: a basket is worth more when the scoring probability of that type of shot in a certain situation is low (for example, for both 3-point and 2-point shots, the scoring probability is lower when approaching the shot clock buzzer sound).

