# **Football Match Prediction Report**

## **Match Information**

Home Team:	LA Galaxy
Away Team:	Los Angeles FC
Referee:	Allen Chapman
Report Generated:	2025-06-09 17:37:07
Prediction Method:	XGBoost + Poisson Distribution Simulation

## **Prediction Summary**

Metric	Home Team	Away Team
Predicted Goals	1.74	2.00
Expected xG	0.72	1.02

#### **Match Outcome Probabilities**

Outcome	Probability	
Home Win	34.1%	
Draw	21.4%	
Away Win	44.4%	

# **Detailed Model Analysis**

### **Model Confidence Metrics**

**Classifier Confidence: 0.549** 

Features Used: 45

Training Samples: Variable by model

### Top Feature Importance

Feature	Importance
Home Shots On Target Per Match	0.2054
Home Shots Per Match	0.1126
Away Shots Per Match	0.1039
Away Form Last5	0.0989

Away Xg Per Match	0.0820
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# **Poisson Distribution Analysis**

### **Expected Goals Parameters**

Home Team Lambda (Expected Goals): 1.737 Away Team Lambda (Expected Goals): 2.002

Most Likely Scoreline: 1-2 Scoreline Probability: 8.3%

## **Top Scoreline Probabilities**

Scoreline	Probability	
1-2	8.28%	
1-1	8.27%	
2-2	7.19%	
2-1	7.18%	
1-3	5.52%	
2-3	4.80%	
0-2	4.76%	
0-1	4.76%	
3-2	4.16%	
3-1	4.16%	

## **Head-to-Head Statistics**

Metric	Value
Home Wins	4
Draws	3
Away Wins	6
Average Home Goals	2.00
Average Away Goals	2.15

# Referee Bias Analysis (RBS)

#### Referee Bias Scores

Team	RBS Score	Confidence	Matches with Referee
LA Galaxy	0.017	62.0%	8
Los Angeles FC	-0.010	72.5%	11

#### **RBS Score Interpretation:**

- Positive values indicate favorable treatment by the referee
- Negative values indicate unfavorable treatment
- Values range from -1.0 to +1.0
- Higher confidence percentages indicate more reliable scores

## **Model Information & Methodology**

**Prediction Method:** XGBoost + Poisson Distribution Simulation

#### **XGBoost Models:**

- Classification model for match outcomes (Win/Draw/Loss)
- Regression models for goals and xG prediction
- Uses 65+ features including team performance, form, and referee bias

#### **Poisson Simulation:**

- Uses predicted goals as lambda parameters
- Calculates probability for each possible scoreline
- Provides more accurate outcome probabilities than direct classification

#### **Key Features Used:**

- Team offensive and defensive statistics
- Recent form (last 5 matches)
- Head-to-head historical performance
- Referee bias scores (RBS)
- Home advantage factor
- Team quality metrics (points per game)

This report was generated by the Football Analytics Prediction System. Predictions are based on historical data and statistical models. Results should be used for informational purposes only.