



# Math vs Physics

## What is the difference?



## As a administrator

- I'm managing over 100 subreddits.
- The posts in r/math and r/Physics are very similar.

What's the difference?

**Expert!**



# Let Math to help me to distinguish Math & Physics

Using Models

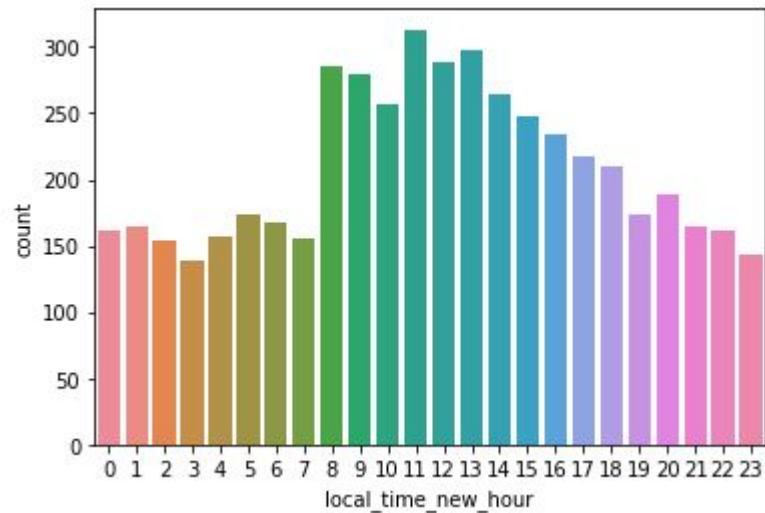
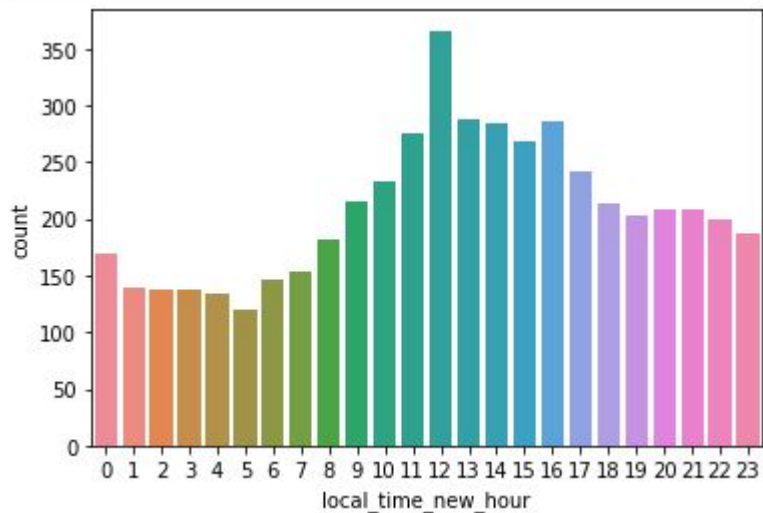


# Data

- 5000 posts / subreddit
- Title + Selftext ( Exclude [Deleted] & [Removed] )
- Time Range: 11/24/2020 - 3/29/2021



## Interesting findings





## Models

- Logistic Regression
- Random Forest
- Adaboost



## Model Result

Model	Precision	Recall
Logistic Regression	89.96%	86.08%
Random Forest	90.43%	81.68%
Adaboost	91.41%	75.76%



## Random data evaluation 1

11/24/2020 - 3/29/2021, 100 observations each

Model	Precision	Recall
Logistic Regression	95%	88%
Random Forest	1%	93%
Adaboost	96%	82%





## Random data evaluation

3/1/2015 - 9/1/2015, 100 observations each

Model	Precision	Recall
Logistic Regression	95%	88%
Random Forest	1%	93%
Adaboost	96%	82%



## Why the posts were removed?

Using model to capture those posts.

Score on training: 85.09%

Score on testing: 75.68%