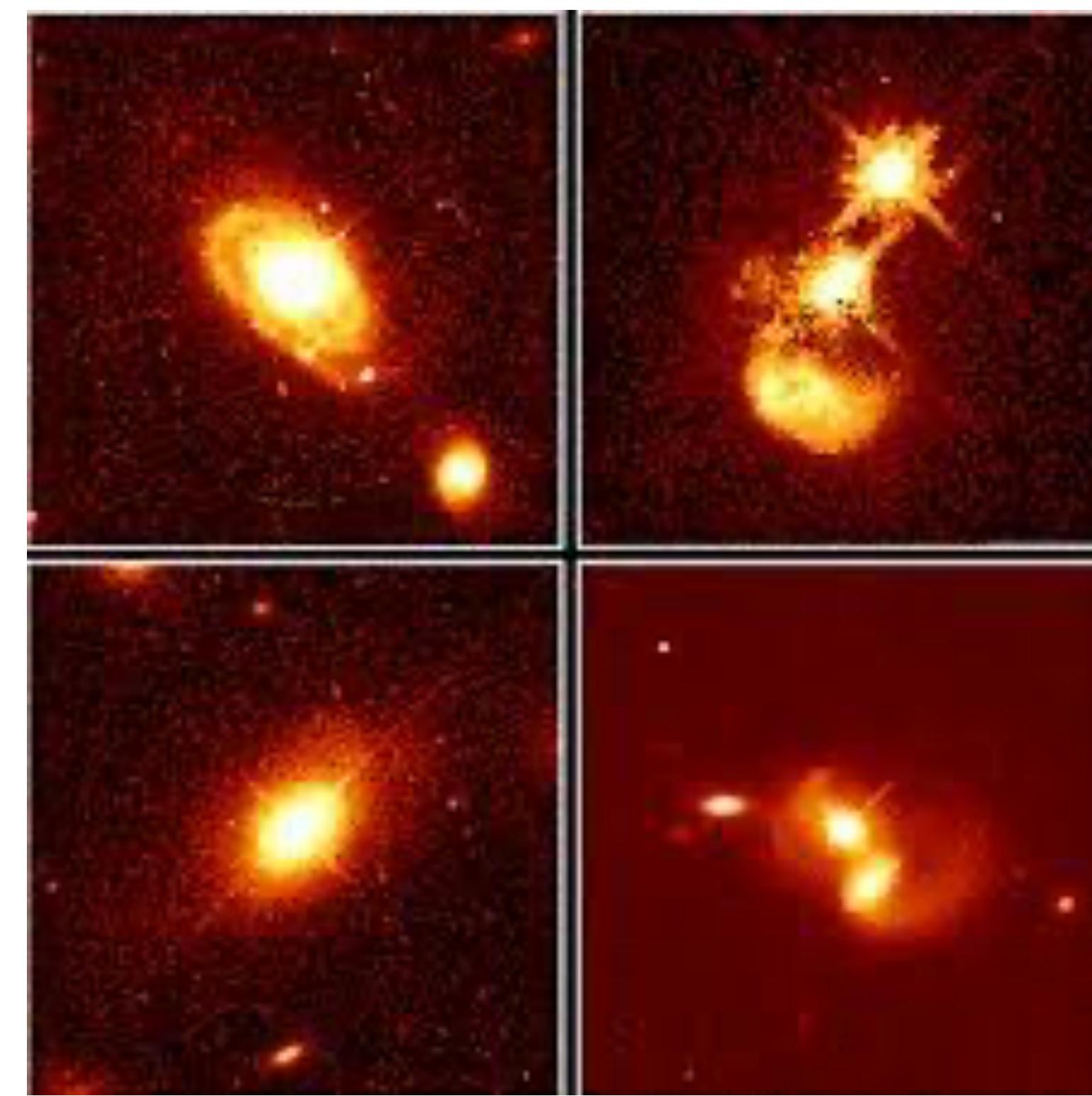


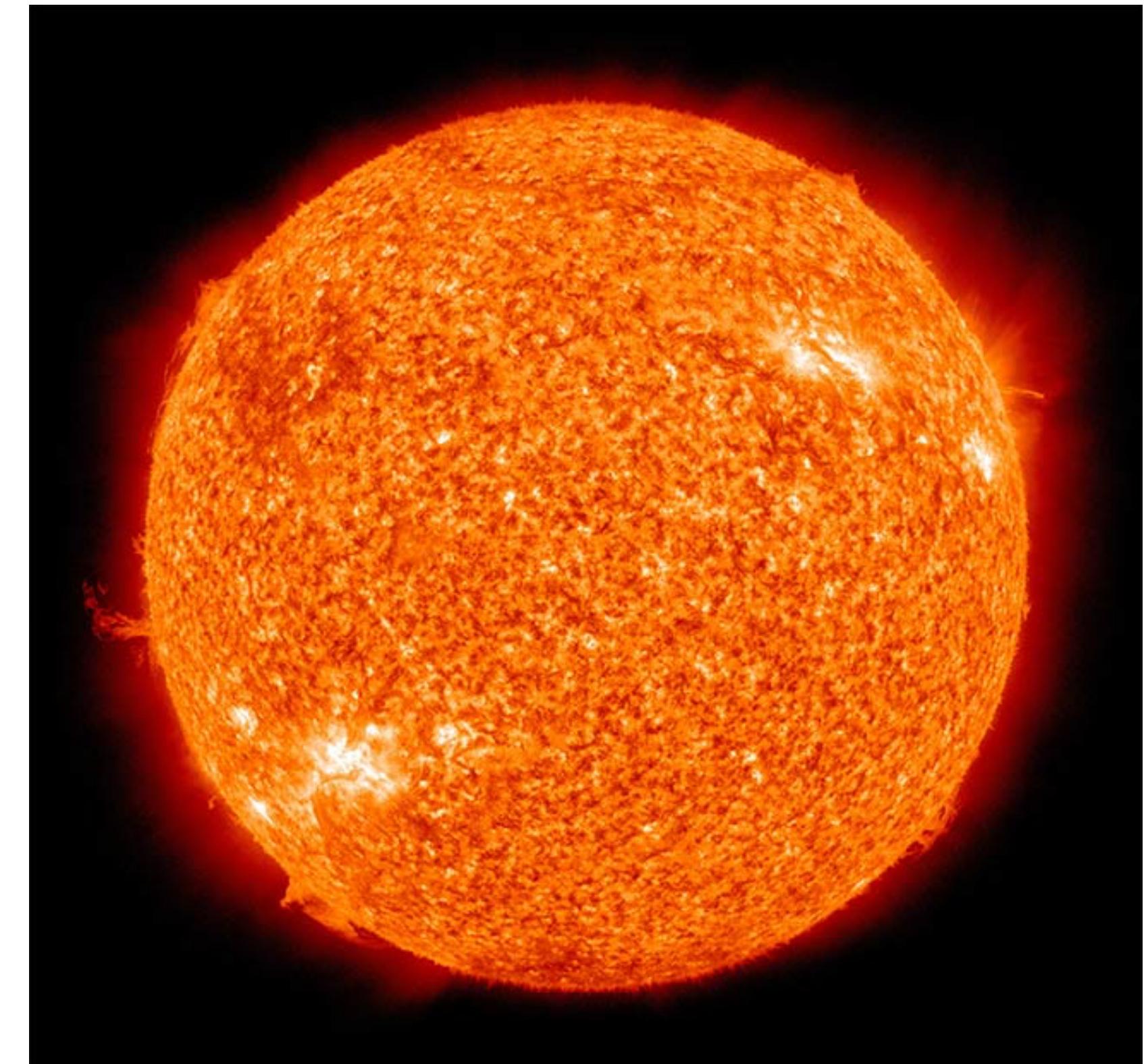
STELLAR CLASSIFICATION



Galaxy



Quasi-Stellar Object (QSO)



Star

3 CLASSES, 17 FEATURES

```
# iterating the columns
for col in star.columns:
    print(col)

[4] ✓ 0.9s
```

```
... obj_ID
alpha
delta
u
g
r
i
z
run_ID
rerun_ID
cam_col
field_ID
spec_obj_ID
class
redshift
plate
MJD
fiber_ID
```

POSSIBLE DATA PRE-PROCESSING

- Balance the dataset through oversampling or undersampling (can use imblearn)
- Feature Selection
- Dimensionality Reduction

THINGS TO TRY

- Evaluate analytical expressions
- Evaluate circuits using PennyLane
- Try using different embeddings
- Trainable encodings
- Changing regularisation parameter when training SVM

LET'S SEE WHO'S THE 'STAR' GROUP