



GitHub issue

Modeling's `separability_matrix` does not compute separability correctly for nested CompoundModels #12906

🔒 Closed Cadair opened this issue on Mar 3, 2022 · 0 comments · Fixed by #12907



Cadair commented on Mar 3, 2022

Member

Consider the following model:

```
from astropy.modeling import models as m
from astropy.modeling.separable import separability_matrix

cm = m.Linear1D(10) & m.Linear1D(5)
```



Assignees

No one assigned

Labels

Bug

modeling

Projects



Large Language Models



```
@@ -242,7 +242,7 @@ def _cstack(left, right):
242 242         cright = _coord_matrix(right, 'right', noutp)
243 243     else:
244 244         cright = np.zeros((noutp, right.shape[1]))
245 244         cright[-right.shape[0]:, -right.shape[1]:] = 1
246 245         cright[-right.shape[0]:, -right.shape[1]:] = right
247 246
248 247     return np.hstack([cleft, cright])
249 248
```

```
@@ -28,6 +28,13 @@
28 28     p1 = models.Polynomial1D(1, name='p1')
29 29
30 30
31 31     cm_4d_expected = (np.array([False, False, True, True]),
32 32                        np.array([[True,  True,  False, False],
33 33                                [True,  True,  False, False],
34 34                                [False, False, True,  False],
35 35                                [False, False, False, True]]))
36 36
37 37
```



TDD_{score}



Golden code patch



Code coverage



Compute test adequacy

✗ → ✓ Generated fail-to-pass tests