

py-dimensional-analysis

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This Python package addresses physical dimensional analysis. In particular, `py-dimensional-analysis` calculates from a given system of (dimensional) variables those products that yield a desired target dimension.

$$y = A^a B^b C_c \tag{1}$$

```
def test_variable_product():  
    v = u.variable_product([si.L, si.M, si.T], [2, 1, 2])  
    assert_allclose(v, [2, 1, 2])  
    v = u.variable_product([si.F, si.F], [1, -1])  
    assert_allclose(v, si.unity)
```

See [Szi07]

1.1 References

[Szi07] Thomas Szirtes. *Applied dimensional analysis and modeling*. Butterworth-Heinemann, 2007.