

py_uncertainty

November 11, 2021

```
[2]: from uncertainties import ufloat  
     #to install: "pip install uncertainties"
```

```
[4]: emf = 9  
     r1 = 100  
     r2 = 120  
  
     ipred = emf / ( r1 + r2 )
```

```
[5]: #EMF 9V +- 0.1 V  
     emf = ufloat(9,.1)
```

```
[6]: print(emf)
```

9.00+/-0.10

```
[7]: print(emf.nominal_value)
```

9.0

```
[8]: print(emf.std_dev)
```

0.1

```
[9]: #EMF 9V +- 0.1 V  
     #R1 = 120 +- 12  
     #R2 = 470 +- 47  
  
     emf = ufloat(9,.1)  
     r1 = ufloat(120,12)  
     r2 = ufloat(470,47)  
  
     ipred = emf / (r1 + r2)
```

```
[10]: print(ipred)
```

0.0153+/-0.0013

```
[11]: print(ipred.nominal_value)
```

0.015254237288135594

```
[12]: print(ipred.std_dev)
```

```
0.0012655510114174793
```

```
[ ]:
```