```
(*Py(mu,3)*)
n = 3;
Ymu = Table[γμi, {γμi, {0, 0.005, 0.05, 0.5}}] *
   Table[n! / (i! (n - i)!), {i, {0, 1, 2, 3}}] * Table[(μ/μ0)^i / (1 + μ/μ0)^n, {i, {0, 1, 2, 3}}]
```

$$\left\{0, \frac{0.015\,\mu}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0}, \frac{0.15\,\mu^2}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0^2}, \frac{0.5\,\mu^3}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0^3}\right\}$$

```
Ymusim = FullSimplify[0.015 μ / (1 + μ/μ0)^3 μ0 + 0.15 μ^2 / (1 + μ/μ0)^3 μ0^2 + 0.5 μ^3 / (1 + μ/μ0)^3 μ0^3]
```

$$\frac{\mu\left(0.5\,\mu^2 + 0.15\,\mu\,\mu 0 + 0.015\,\mu 0^2\right)}{\left(\mu+\mu 0\right)^3}$$

```
Ym = Table[γmi, {γmi, {0, 0.04, 0.2, 1.0}}] *
   Table[n! / (i! (n - i)!), {i, {0, 1, 2, 3}}] * Table[(μ/μ0)^i / (1 + μ/μ0)^n, {i, {0, 1, 2, 3}}]
```

$$\left\{0, \frac{0.12\,\mu}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0}, \frac{0.6\,\mu^2}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0^2}, \frac{1.\,\mu^3}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0^3}\right\}$$

```
Ymsim = FullSimplify[0.12 μ / (1 + μ/μ0)^3 μ0 + 0.6 μ^2 / (1 + μ/μ0)^3 μ0^2 + 1 μ^3 / (1 + μ/μ0)^3 μ0^3]
```

$$\frac{\mu\left(\mu^2 + 0.6\,\mu\,\mu 0 + 0.12\,\mu 0^2\right)}{\left(\mu+\mu 0\right)^3}$$

```
Pymu5 =
  FullSimplify[(μ (0.5 μ^2 + 0.15 μ μ0 + 0.015 μ0^2) / (μ + μ0)^3) / (0.5 + μ (μ^2 + 0.6 μ μ0 + 0.12 μ0^2) / (μ + μ0)^3)]
```

$$\left(\mu\left(0.333333\,\mu^2 + 0.1\,\mu\,\mu 0 + 0.01\,\mu 0^2\right)\right) \Big/ \left(1.\,\mu^3 + 1.4\,\mu^2\,\mu 0 + 1.08\,\mu\,\mu 0^2 + 0.333333\,\mu 0^3\right)$$