```
(*Pl(mu,3)*)
n = 3;
L = Table[li, {li, {1.0, 0.6, 0.3, 0.1}}] *
   Table[n! / (i! (n - i)!), {i, {0, 1, 2, 3}}] * Table[(μ/μ0)^i / (1 + μ/μ0)^n, {i, {0, 1, 2, 3}}]
```

$$\left\{\frac{1.}{\left(1+\frac{\mu}{\mu 0}\right)^3}, \frac{1.8\,\mu}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0}, \frac{0.9\,\mu^2}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0^2}, \frac{0.1\,\mu^3}{\left(1+\frac{\mu}{\mu 0}\right)^3 \mu 0^3}\right\}$$

```
Lsim = FullSimplify[1 / (1 + μ/μ0)^3 + 1.8 μ / (1 + μ/μ0)^3 μ0 + 0.9 μ^2 / (1 + μ/μ0)^3 μ0^2, 0.1 μ^3 / (1 + μ/μ0)^3 μ0^3]
```

$$\frac{\mu 0\,\left(0.9\,\mu^2 + 1.8\,\mu\,\mu 0 + 1.\,\mu 0^2\right)}{(\mu + \mu 0)^3}$$

```
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]
```

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

```
(* Pl = L/(Ym+km) *)
Plmu3 = FullSimplify[(μ0 (0.9 μ^2 + 1.8 μ μ0 + 1 μ0^2) / (μ + μ0)^3) / (0.5 + μ (μ^2 + 0.6 μ μ0 + 0.12 μ0^2) / (μ + μ0)^3)]
```

$$\frac{2.\,\mu 0\,\left(0.9\,\mu^2 + 1.8\,\mu\,\mu 0 + \mu 0^2\right)}{3.\,\mu^3 + 4.2\,\mu^2\,\mu 0 + 3.24\,\mu\,\mu 0^2 + 1.\,\mu 0^3}$$