

# Computations

$$\bar{h} = 1$$

## 1 $S_3$ , char 3, $\tau$ trivial

### 1.1 Hilbert polynomial

$$t^{12} + 3t^{11} + 6t^{10} + 8t^9 + 9t^8 + 9t^7 + 9t^6 + 9t^5 + 9t^4 + 8t^3 + 6t^2 + 3t + 1 = (t^2 + t + 1)^3(t^6 + t^3 + 1).$$

### 1.2 Generators

$$x_0^3 + x_1^3 + x_2^3$$

$$((2c + 2)/c)x_0^3 - x_0^2x_1 + x_0x_1^2 + ((c + 1)/c)x_1^3 + x_0^2x_2 - x_1^2x_2 - x_0x_2^2 + x_1x_2^2$$

$$x_0^9.$$