$$c(s,s)\,\mathbb{E}f'(t)f''(t) - c(t,t)\,\mathbb{E}f'(s)f''(s)$$

$$= c(s,s)\Big(\mathbb{E}f'(s)f''(s) + (t-s)\times$$

$$\Big(\mathbb{E}f''(s)f''(s) + \mathbb{E}f'(s)f'''(s)\Big)$$

$$- \Big(c(s,s) + \frac{d}{ds}\Big|_{s=t} c(s,s)\,(t-s)\Big)\,\mathbb{E}f'(s)f''(s)$$

$$= (t-s)\Big(c(s,s)\Big(\mathbb{E}f''(s)f''(s) + \mathbb{E}f'(s)f'''(s)\Big)$$

$$- \frac{d}{ds}\Big|_{s=t} c(s,s)\Big)\times \mathbb{E}f'(s)f''(s)\Big)$$

inner int converges to

In the original expression have terms: → when are multiplied by $-(s-t)^2$

$$\mathbb{E}f''(t)f'''(t)c(s,s) + \mathbb{E}f'(s)f'''(s)c(t,t)$$

which converges to $\mathbb{E}f''(t_0)f'''(t_0)c(t_0,t_0) + \mathbb{E}f'(t_0)f'''(t_0)c(t_0,t_0)$

converges to $c(t_0,t_0)\Big(\mathbb{E}f''(t_0)f''(t_0) + \mathbb{E}f'(t_0)f'''(t_0)$

$$- \frac{d}{ds}\Big|_{s=t_0} c(s,s)\Big)$$