Known typos for "*Analytic states in quantum field theory on curved spacetimes*" by A. Strohmaier and E. Witten
`Last updated 18/10/2024`

- page 37, before Lemma E.2 should say

$$(T_{\mu,h}u_h)(x,\xi) = \mu^{\frac{d}{4}}2^{-\frac{d}{2}}(\pi h)^{-\frac{3d}{4}}\int_{\mathbb{R}^d}e^{-\frac{\mu}{2h}(x-y)^2}u_h(x)e^{-\frac{i}{h}(x-y)\cdot\xi}\mathrm{d}x$$

$$= \mu^{-\frac{d}{2}}\left(T_{\mu^{-1}h}u_h\right)(x,\mu^{-1}\xi)$$

- In the proof of Prop. E3 it should say:

  We can write $e^{-\frac{i}{h}\xi x}T_h(u)(x,\xi) = (\pi h)^{-\frac{d}{4}}(\mathcal{F}_h)_{y\to\xi}(e^{-\frac{(x-y)^2}{2h}}u(y))$. We then have for the semi-classical Fourier transform $\mathcal{F}_h(u_h) * \mathcal{F}_h(v_h) = (2\pi h)^{\frac{d}{2}}\mathcal{F}_h(u_hv_h)$. We can therefore write the FBI-transform of a product as follows

$$T_h(u_hv_h)(x,\xi) = (h\pi)^{-d/4}\int_{\mathbb{R}^d}\left((T_{\frac{1}{2},h}u_h)(x,\xi-\eta)\right)\left((T_{\frac{1}{2},h}v_h)(x,\eta)\right)\mathrm{d}\eta.$$

- In Prop. E5 the statement should have been

$$K'_\epsilon \subset \{(x,(\mathrm{d}F(x))^T\eta) \in \mathbb{R}^d \times \mathbb{R}^d \mid \exists\eta \in T^*_{F(x)}\tilde{\mathcal{U}} : (F(x),\eta) \in K^c\}^c.$$

  instead of

$$K'_\epsilon \subset \{(x,(\mathrm{d}F(x))^T\eta) \in \mathbb{R}^d \times \mathbb{R}^d \mid (F(x),\eta) \in K\}.$$

  These are the same only if F is a submersion.

- the integral at the end of page 39 after Equ. (11) is over $\mathbb{R}^{2d'} \smallsetminus K$ instead of $\mathbb{R}^{2d} \smallsetminus K$.