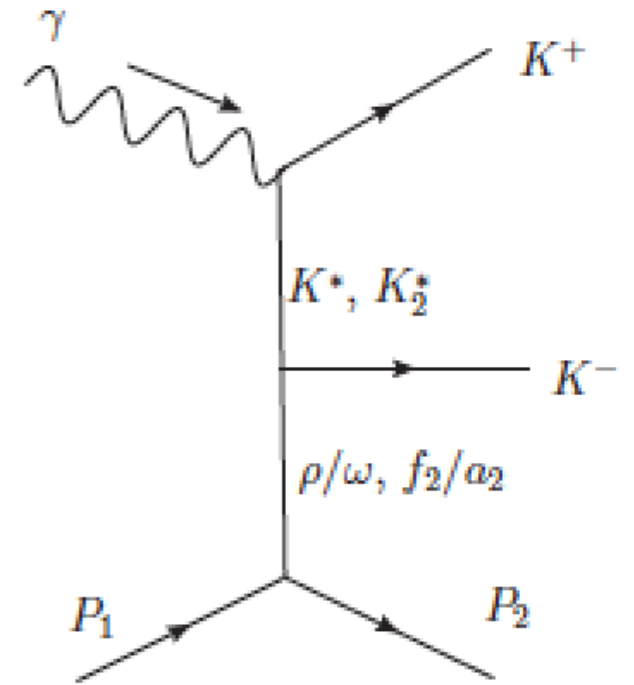


Ming Shi Paper

Justin Stevens

Spin Structure

$$M = A_5 \sum_{\lambda_{A1}, \lambda_{B3}} V^u(\lambda_{A1}) V^m(\lambda_{A1}, \lambda_{B3}) V_{II}^l(\lambda_{B3}).$$



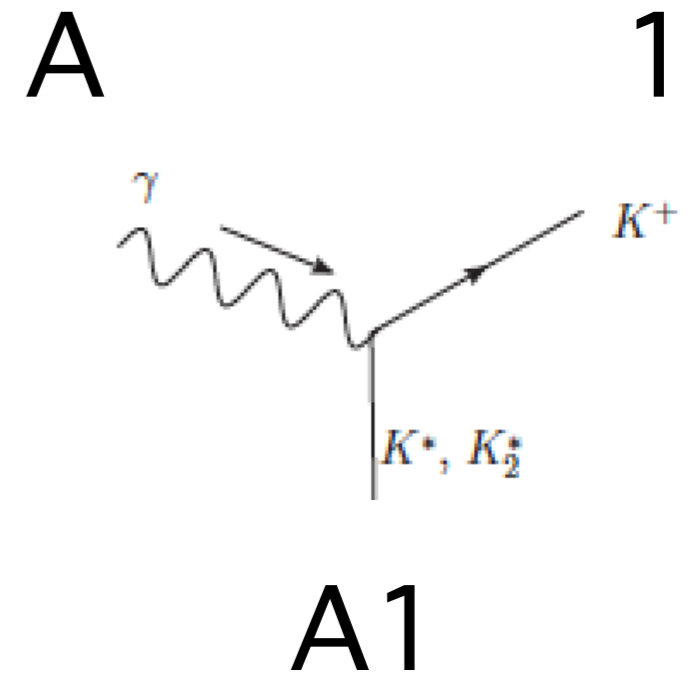
$$V^u(\lambda_{A1}) = \epsilon_{\mu\nu\alpha\beta} \epsilon_\mu(p_A, \lambda_A) \epsilon_\nu(p_{A1}, \lambda_{A1}) p_1^\alpha p_A^\beta.$$

$$V^m(\lambda_{A1}, \lambda_{B3}) = \epsilon_{\mu\nu\alpha\beta} \epsilon^\mu(p_{A1}, \lambda_{A1}) \epsilon^\nu(p_{B3}, \lambda_{B3}) p_{A1}^\alpha p_2^\beta.$$

$$V_{II}^l(\lambda_{B3}) = \epsilon^\mu(p_{B3}, \lambda_{B3}) \bar{u}(p_{\bar{3}}, \lambda_{\bar{3}}) i \sigma_{\mu\nu} p_{B3}^\nu u(p_B, \lambda_B),$$

Spin Structure

$$V^u(\lambda_{A1}) = \epsilon_{\mu\nu\alpha\beta} \epsilon_\mu(p_A, \lambda_A) \epsilon^\nu(p_{A1}, \lambda_{A1}) p_1^\alpha p_A^\beta.$$

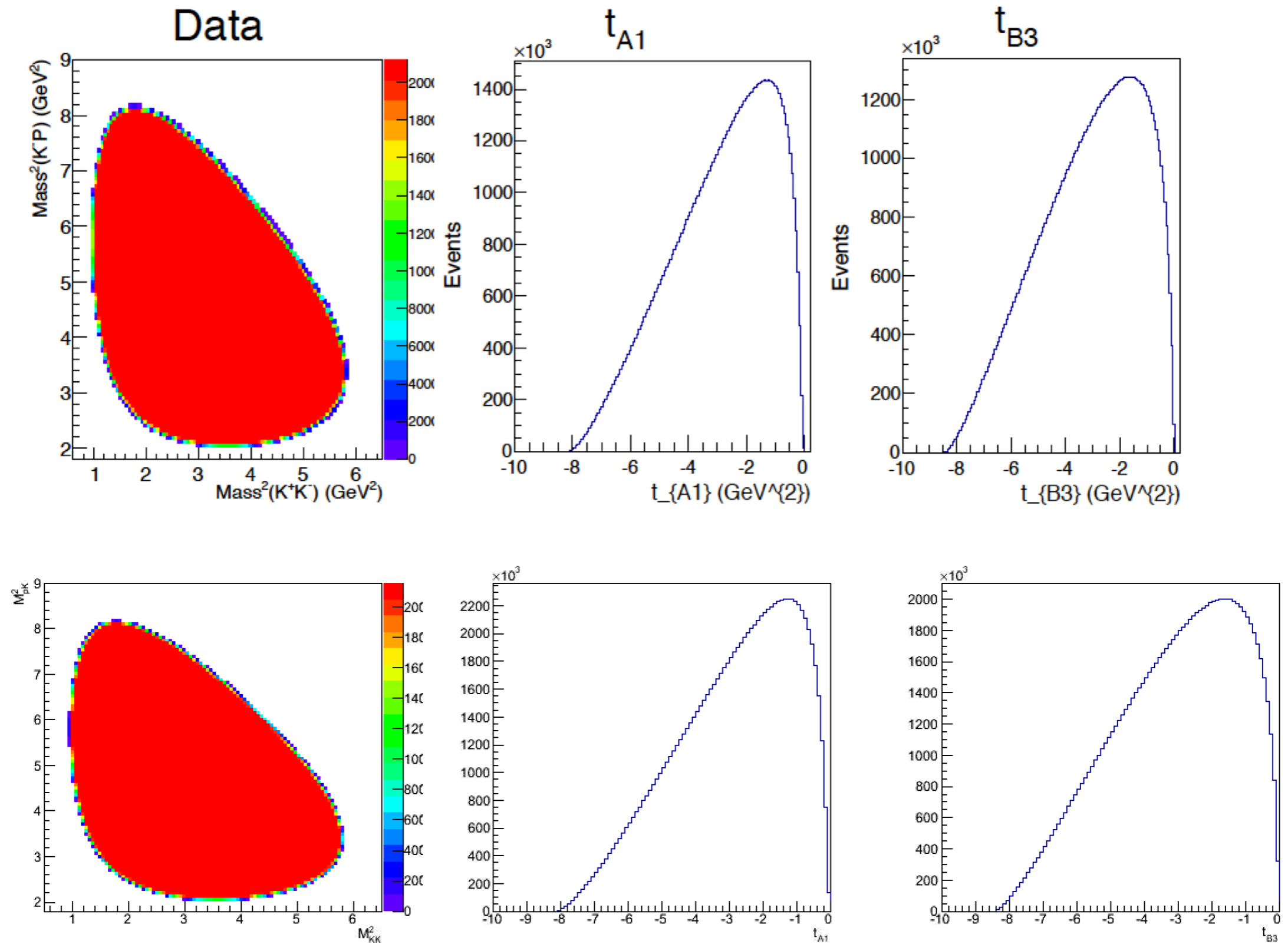


```
LeviCivitaTensor levi;
```

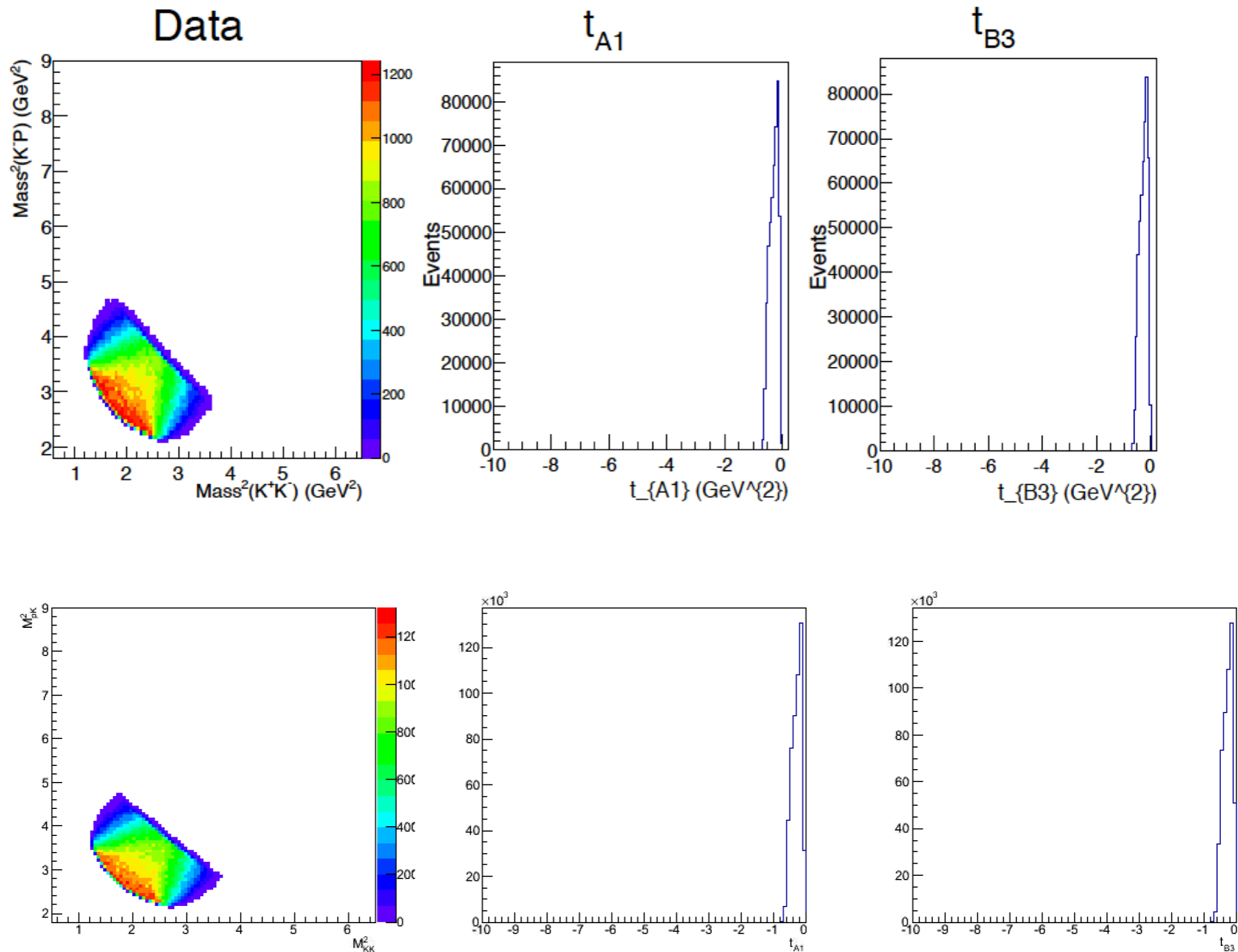
```
PolVector epsGamma(1);  
epsGamma.SetP4(p4Gamma, p4Gamma.M());  
PolVector epsA1(1);  
epsA1.SetP4(p4A1, p4A1.M());
```

```
Tensor<complex<double>> amp_u;  
amp_u = levi*epsGamma(mz_Gamma)*epsA1(mz_A1)*p4_Kp*p4Gamma;  
spinfact_u = amp_u();
```

Phase space

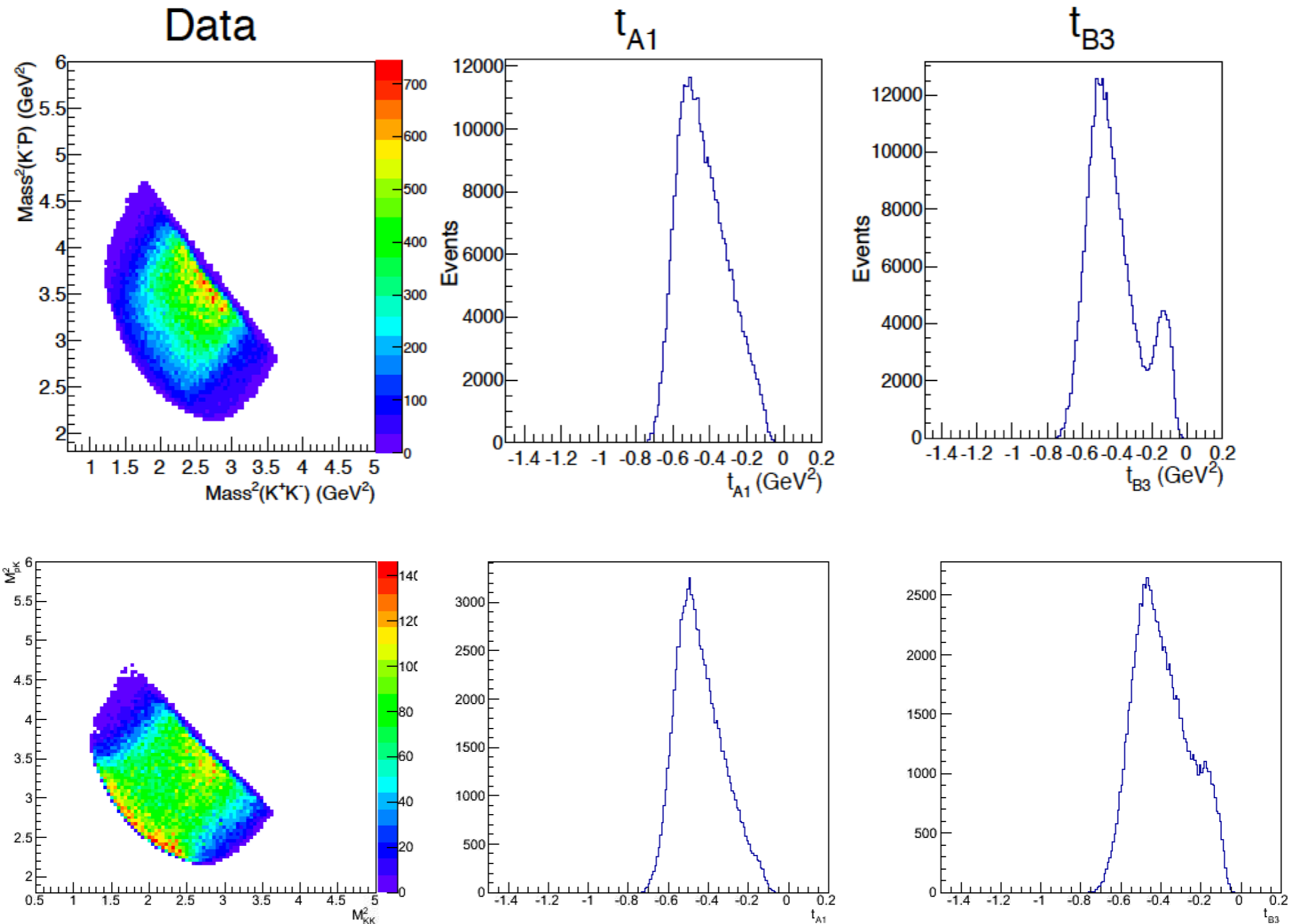


Van Hove selection



Spin Structure

$$M = \cancel{A_5} \sum_{\lambda_{A1}, \lambda_{B3}} V^u(\lambda_{A1}) V^m(\lambda_{A1}, \lambda_{B3}) V_{II}^l(\lambda_{B3}).$$



Transverse Momentum Cut

