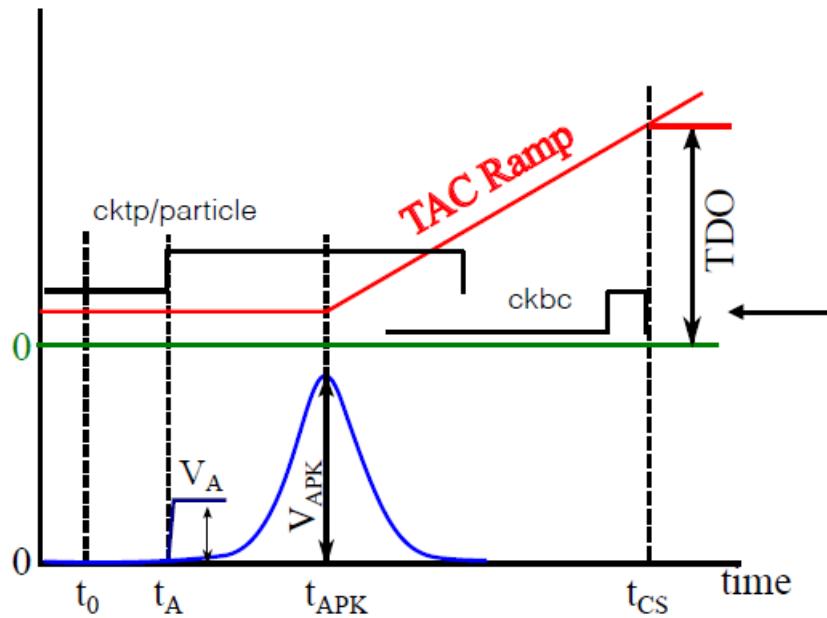


- VMM design targets **synchronous** machines hence can be difficult to use in an environment like a **test beam** where **asynchronous operation** is needed but **precise timing** is needed to be measured (drift time)
- Most chips designed for synchronous machine **suffer from time jitter in such environment**
- On VMM a **mode was foreseen** to do such measurement where the **ckbc** can be used as a **strobe** and **not like a real clock**
- It can be **send as a trigger signal** with a **fixed latency** achieving precise time measurements



- Trigger signal from **external source**
- Can be combined with **register stcr** where **channel resets** if stop signal not occurs within the **TAC ramp**
- **Implies that trigger is propagated** within the TAC ramp up time (60ns-650ns)
- The **longer the TAC** though the **lower the resolution** on 8-bit information from the ADC
- Highly correlated trigger readout and noise subtraction