**THE EVENT LOOP in XRootD**

the event loop is a mechanism for getting feedback from the kernel whether

- there is space in the tcp output buffer for writing

- there are data in the tcp receive buffer for reading

now, in the application there are two quest

1) the queue of requests the client wants to issue to the server, whenever there is a write event we take a request from the queue and write it to the socket, note: the tcp buffer might not be big enough to accommodate the whole request, so it might be several write events will be needed to write a single request

every request is accompanied by a message handler, after the request is fully written to the socket, the message handler is being moved to the 2nd queue for the incoming responses

2) whenever the event loop yields a read event it means we can read something from the socket, so we read out a server response, again it might be one will need several read events to read a full server response

once we read a full server response we look in the queue for incoming responses for a matching message handler

once we have the handler, after parsing the response, we can call the user callback

mind that we are executing the callback in a threadpool

that's more or less the high level overview