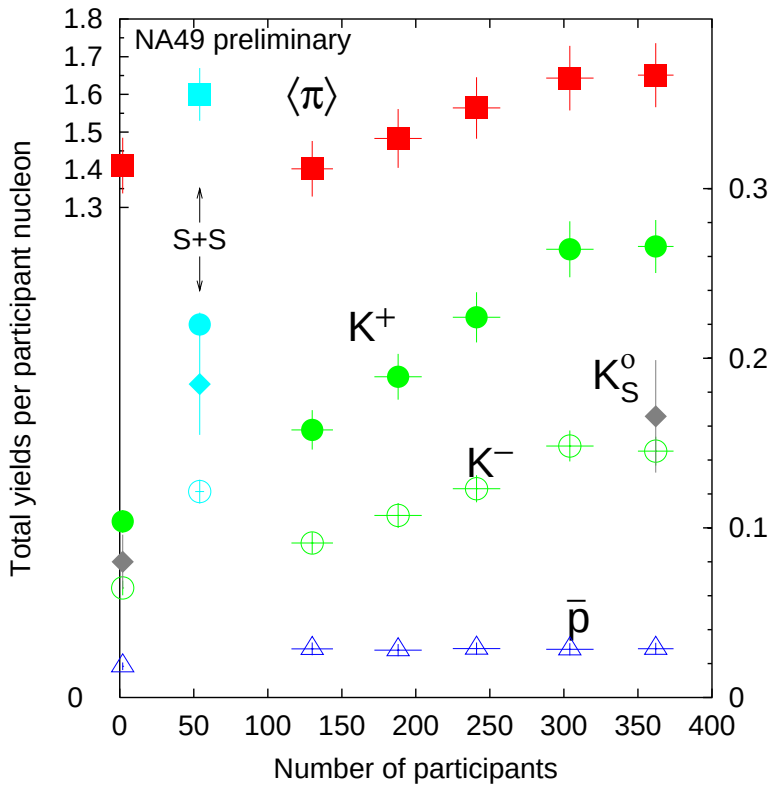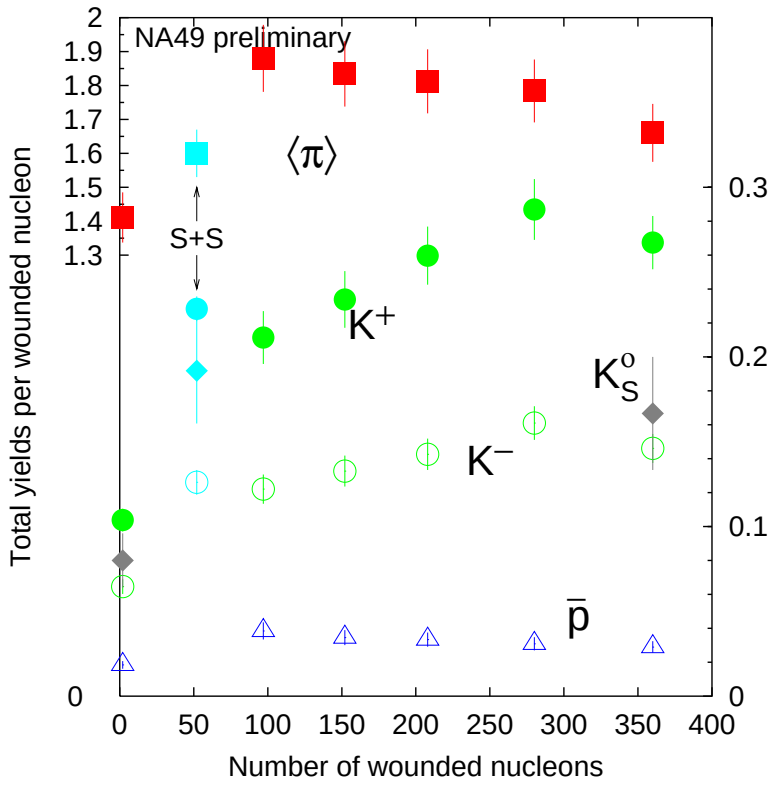integrated yield/participant