

# Why Physics on GPUs?



- **GPU: very high data parallelism**
  - G71: 24 pixel pipelines, 48 shading processors
  - 1000s of simultaneous threads
  - Very high memory bandwidth
  - SLI enables 1-4 GPUs per system
- **Physics: very high data parallelism**
  - 1000s of colliding objects
  - 1000s of collisions to resolve every frame
  - Requires 1000s of floating point operations per collision

*Physics is an ideal match for GPUs*