

TPA 11: Simulating Multiple Explosion

Objective:

Simulating multiple explosions

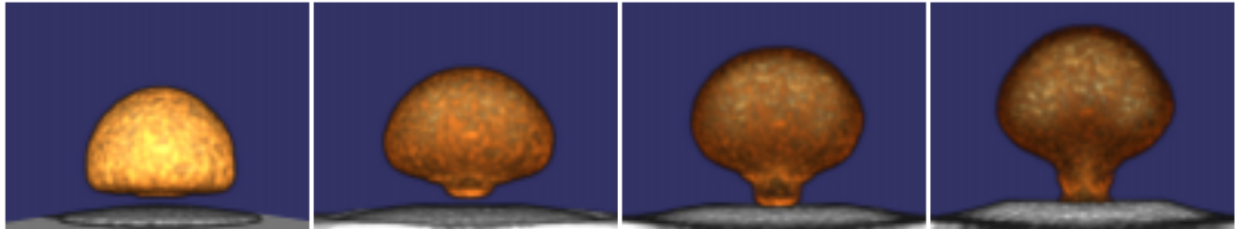
- i. Free and open environment
- ii. In Container, Car or beside Wall

After-effects of explosions to be shown with flame/ fire and smoke.

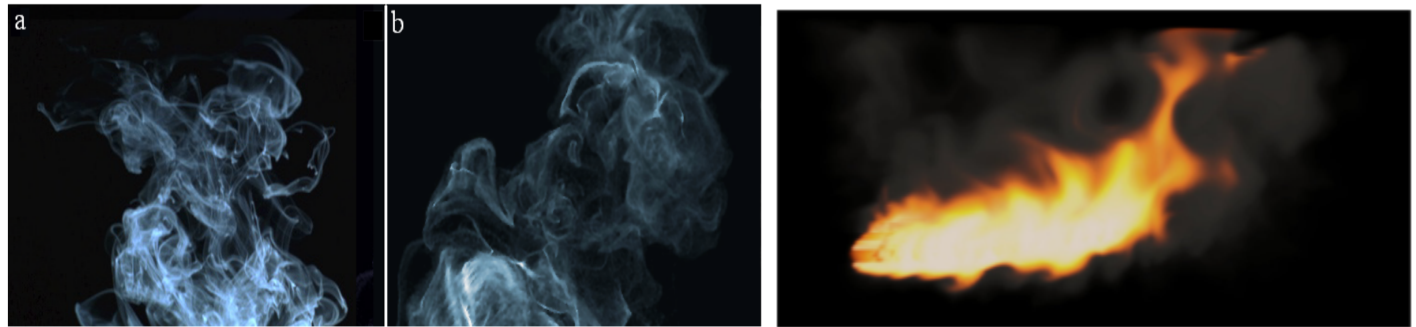
Input

- Explosion strength, size and amount of explosive material
- Container dimension
- Duration of the explosion

Output:



Animation sequence showing the explosion



References:

1. Animating suspended particle explosions. Bryan E. Feldman, James F. O'Brien, and Okan Arikan. 2003. In *ACM SIGGRAPH 2003 Papers* (SIGGRAPH '03). ACM, New York, NY, USA, 708-715.
<http://doi.acm.org/10.1145/1201775.882336>
2. Gary D. Yngve, James F. O'Brien, and Jessica K. Hodgins. 2000. Animating explosions. In *Proceedings of the 27th annual conference on Computer graphics and interactive techniques* (SIGGRAPH '00). ACM

Press/Addison-Wesley Publishing Co., New York, NY, USA, 29-36.
<http://dx.doi.org/10.1145/344779.344801>

3. Nick Rasmussen, Duc Quang Nguyen, Willi Geiger, and Ronald Fedkiw. 2003. Smoke simulation for large scale phenomena. In *ACM SIGGRAPH 2003 Papers* (SIGGRAPH '03). ACM, New York, NY, USA, 703-707.
<http://doi.acm.org/10.1145/1201775.882335>
4. A vortex particle method for smoke, water and explosions, Andrew Selle, Nick Rasmussen, and Ronald Fedkiw. 2005. In *ACM SIGGRAPH 2005 Papers* (SIGGRAPH '05), Markus Gross (Ed.). ACM, New York, NY, USA, 910-914. <http://doi.acm.org/10.1145/1186822.1073282>