

## Using the Accumulation Buffer

Mike Bailey

Oregon State University



### Using the Accumulation Buffer to Achieve *Motion Blur*

1. Multiply the Accumulation Buffer by ( 1. - K )
2. Draw the new frame into the Back Buffer
3. Multiply the Back Buffer by K and add it into the Accumulation Buffer ("accumulate")
4. Return the Accumulation Buffer to the Back Buffer
5. glutSwapBuffers

The first frame results in:  $FB1 = K * F1 + (1 - K) * \text{Black}$

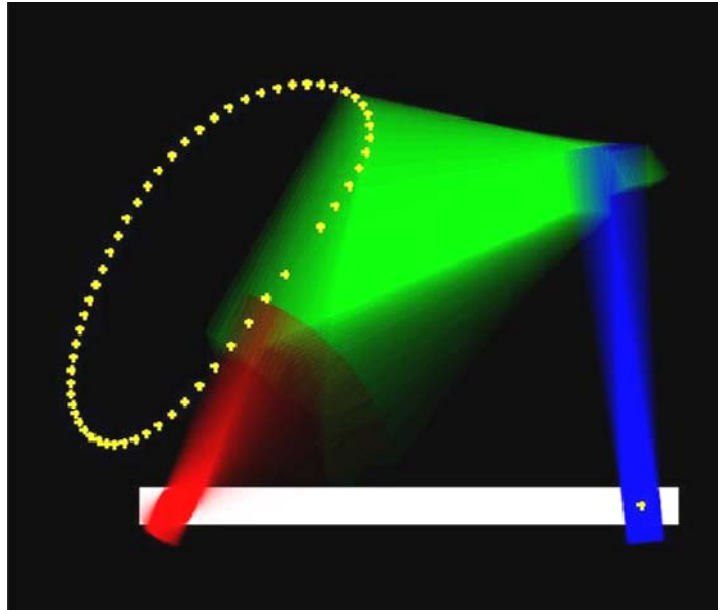
The second frame results in:  $FB2 = K * F2 + (1 - K) * FB1 = K * F2 + (1 - K) * K * F1 + (1 - K)^2 * \text{Black}$

The third frame results in:  $FB3 = K * F3 + (1 - K) * K * F2 + (1 - K)^2 * K * F1 + (1 - K)^3 * \text{Black}$

```
glAccum( GL_MULT, 1.-K );
glAccum( GL_ACCUM, K );
glAccum( GL_RETURN, 1.00 );
```

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K = 0.10

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