

% Matching solutions method

```
function [ x, L ] = matching_solutions_miter( A, b, n, k, delta, ✓  
x0, L0)  
  
    cvx_begin quiet  
        variable x(n, k)  
        variable L(n, 1)  
        % define cost function  
        for i=1:k  
            f(i) = norm(x(:,i)-L) / norm(x0(:,i)-L0);  
        end  
  
        minimize(sum(f))  
  
        subject to  
        for i=1:k  
            (b(:, :, i)-A(:, :, i)*x(:, i))'*(b(:, :, i)-A(:, :, i)*x(:, i)) ✓  
            <= delta;  
        end  
    cvx_end  
end
```