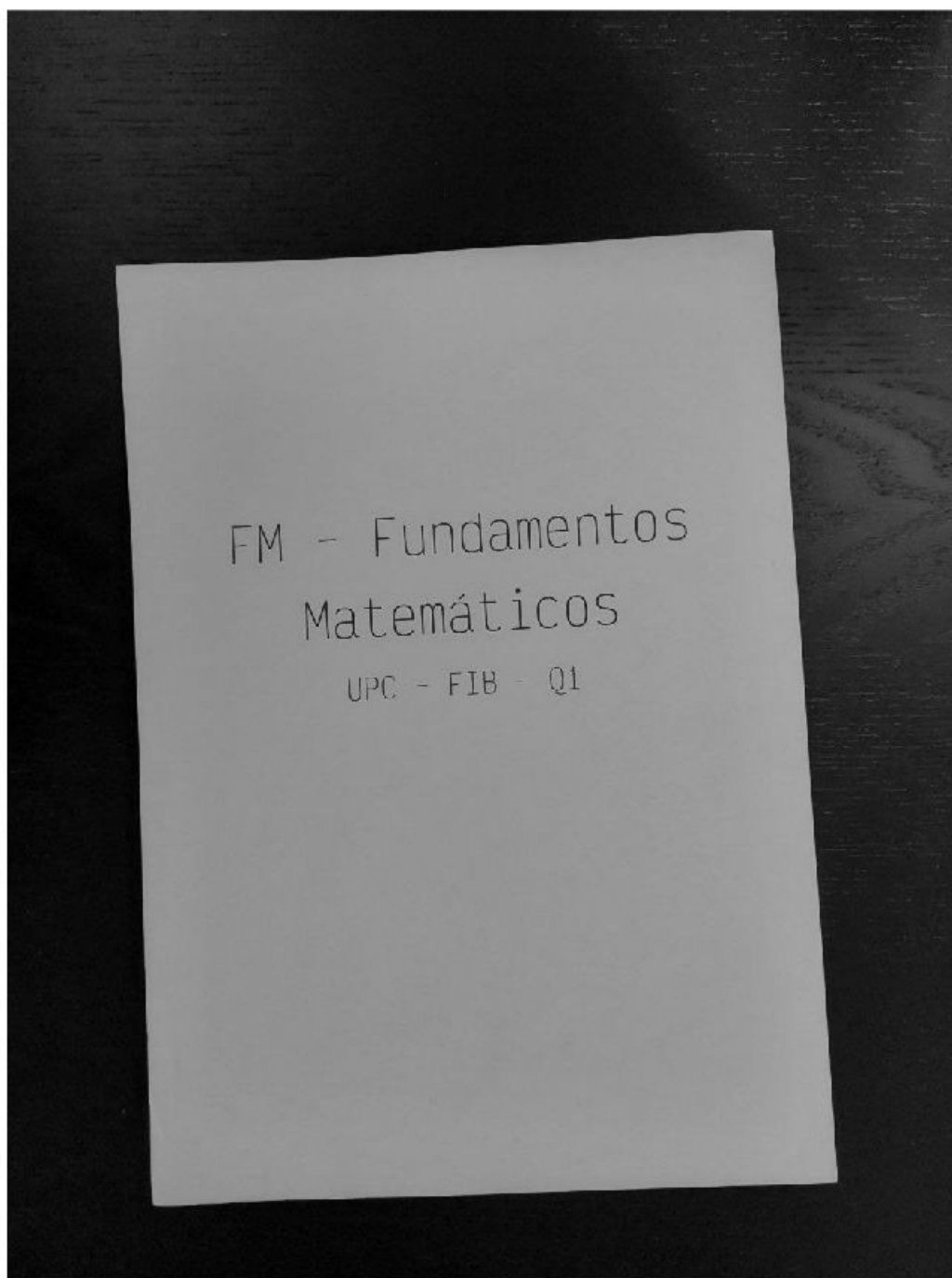


Sessió 6

El mateix que l'altre exercici però amb un binaritzat local.

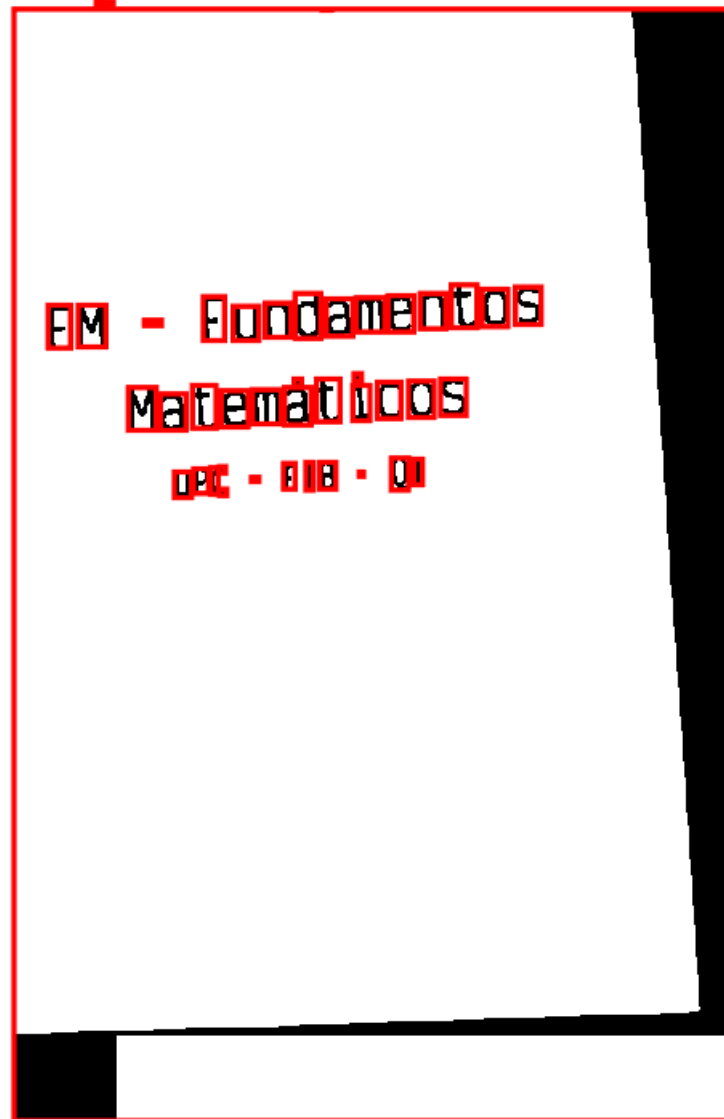
No hem aconseguit un molt bon resultat.

```
imagen_original = imread('foto1.jpeg');  
imagen_grises = rgb2gray(imagen_original);  
  
H = fspecial('gaussian');  
imagen_grises = imfilter(imagen_grises, H);  
  
imshow(imagen_grises);
```



```
imagen_binarizada = colfilt(imagen_grises, [5 5], 'sliding', @myfunction);  
imshow(imagen_binarizada, []);  
labeledImage = bwconncomp(~imagen_binarizada);  
    measurements = regionprops(labeledImage, 'BoundingBox');  
for k = 1 : length(measurements)  
    thisBB = measurements(k).BoundingBox;  
    rectangle('Position', [thisBB(1),thisBB(2),thisBB(3),thisBB(4)],...
```

```
'EdgeColor','r','LineWidth',2 )
end
```



```
function theta = rotacion(imagen)
    [y, x] = find(imagen);

    nx = x - mean(x);
```

```

ny = y - mean(y);

nx = nx';
ny = ny';

c = cov(nx, ny);
[evector, eval] = eig(c);

[~, ind] = max(diag(eval));

theta = -pi/2-atan2(evector(ind, 2), evector(ind, 1));
end

function [y] = myfunction(c)
[f col] = size(c);
media = sum(c)/f;
y = c(fix(f/2)+1)<media+20;
end

```