

```

199 if(sampl)
200     while iChannel > 0
201         hpChannelX = imfilter(imfilter(hpChannels{iCh
202             lx', 'replicate', 'conv'), kx, 'replicate'
203
204         hpChannelY = imfilter(imfilter(hpChannels{iCh
205             kx', 'replicate', 'conv'),lx, 'replicate'
206
207         lpChannel = interp2(lpChannel,'spline');
208         if mod(size(hpChannelX,1),2) == 0
209             lpChannel = [lpChannel;lpChannel(end,:)];
210         end
211         if mod(size(hpChannelX,2),2) == 0
212             lpChannel = [lpChannel lpChannel(:,end)];
213         end
214
215         lpChannel = imfilter(imfilter(lpChannel,hx','
216             'replicate');
217         lpChannel = hpChannelX + hpChannelY +lpChanne
218         iChannel = iChannel-1;
219     end
220 else
221     while iChannel > 0
222         hpChannelX = imfilter(imfilter(hpChannels{iCh
223             zeroPad(lx,iChannel)', 'replicate', 'conv
224             zeroPad(kx,iChannel), 'replicate', 'conv'
225
226         hpChannelY = imfilter(imfilter(hpChannels{iCh
227             zeroPad(kx,iChannel)', 'replicate', 'conv
228             zeroPad(lx,iChannel), 'replicate', 'conv'
229
230         lpChannel = imfilter(imfilter(lpChannel,zeroP
231             'replicate'),zeroPad(hx,iChannel),'replic
232
233         lpChannel = hpChannelX + hpChannelY +lpChanne
234         iChannel = iChannel-1;
235     end
236 end
237 img = lpChannel;
238 % -----
239
240 % ----- SOFTTHRESH -----
241 function U = softThresh( V, tMax, tMin, sigma, alpha,
242 %SOFTTHRESH performs soft thresholding of the values
243 %   Y = softThresh( X, TMAX, TMIN, S, A, L ) performs
244 %   thresholding of X with the threshold t computed a
245 %
246 %           ( (TMAX-A*(L-1))*S  if   TMAX-A*(L-1)>TMIN
247 %   t = <
248 %           ( TMIN*S              otherwise
249
250 % Calculate a threshold
251 c = tMax - alpha*(lev-1);
252
253 if c > tMin
254     t = c*sigma;
255 else

```