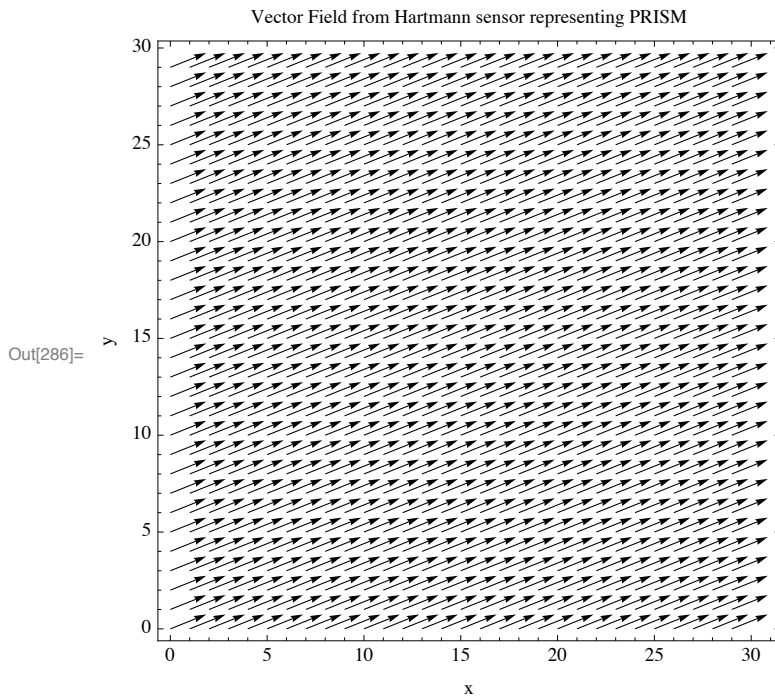


```
In[283]:= Needs["VectorFieldPlots`"]
```

Get a discrete Vector Field of spots displacements =
{xi, yi}, {dxi, dyi}}, where {xi, yi} are the coordinates of the ith spot and
{dxi, dyi} are the displacements of the ith spot
- In this case, make the displacement of each spot the same = {0.01, 0.004}

```
In[284]:= t1 = {};  
For[ii = 0.001, ii ≤ 30, ii++, {  
  For[jj = 0.001, jj ≤ 30, jj++, {  
    (*Get Vector Field*)  
    p1 = {{ii, jj}, {0.01, 0.004}};  
    t1 = Append[t1, p1];  
  }];  
}];
```

```
In[286]:= ListVectorFieldPlot[t1, Frame → True, ScaleFactor → 2,
  FrameLabel → {"x", "y", "Vector Field from Hartmann sensor representing PRISM"}]
```



Determine the dot product of the unit radial vector of each spot (relative to the center of the image at {15,15}) with the displacement of each spot = dr

```
In[287]:= t1 = {};

For[jj = 1, jj ≤ Length[t1], jj++, {
  p1 = t1[[jj]];

  (*Get Dot Product of dr with unit vector r1 for each spot*)
  r0 = p1[[1]] - {15, 15};
  r1 = r0 / Norm[r0];
  dr = p1[[2]];

  rp = r1.dr;

  t2 = Append[t2, {p1[[1]][[1]], p1[[1]][[2]], rp}];
}];
```

```
In[289]:=
```

```
In[290]:= ListContourPlot[t2, ColorFunction -> "Rainbow",  
FrameLabel -> {"x", "y", "Radial component of PRISM."}]
```

