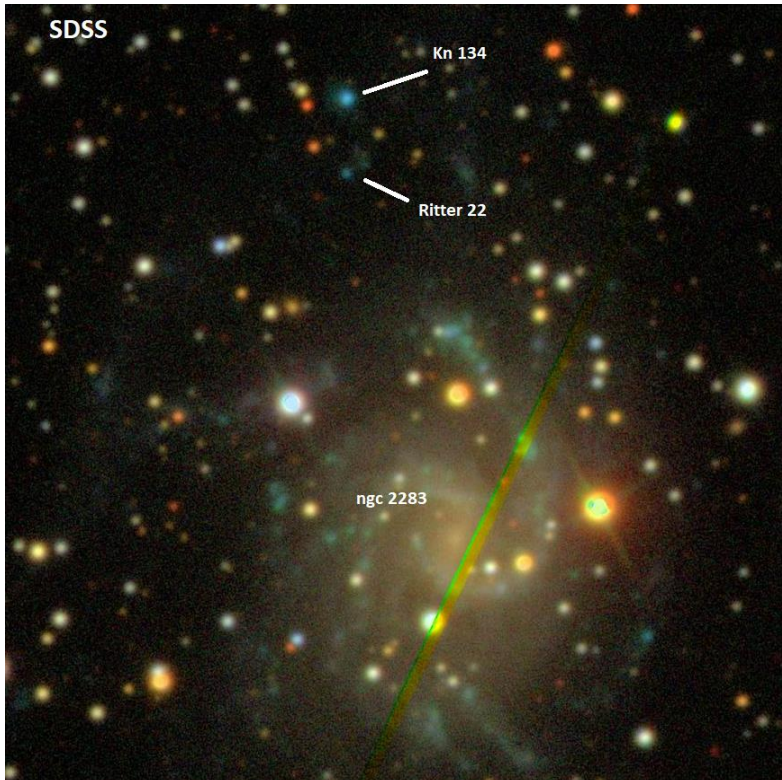


SPECTROSCOPIC RECORD SHEET

Object Identification

Object	Kn 134 - PNG 228.6-09.3
Object Type	PN Candidate
Classification	Possible
Coordinates J2000	06:45:55.00 -18:10:22.08
Image Source : SDSS	 An SDSS image showing a field of stars. A diagonal green and yellow line, likely a slit or a filter edge, runs from the bottom left towards the top right. Three stars are specifically labeled with white lines pointing to them: 'Kn 134' (a blue star), 'Ritter 22' (a yellow star), and 'ngc 2283' (a yellow star). The text 'SDSS' is in the top left corner of the image area.

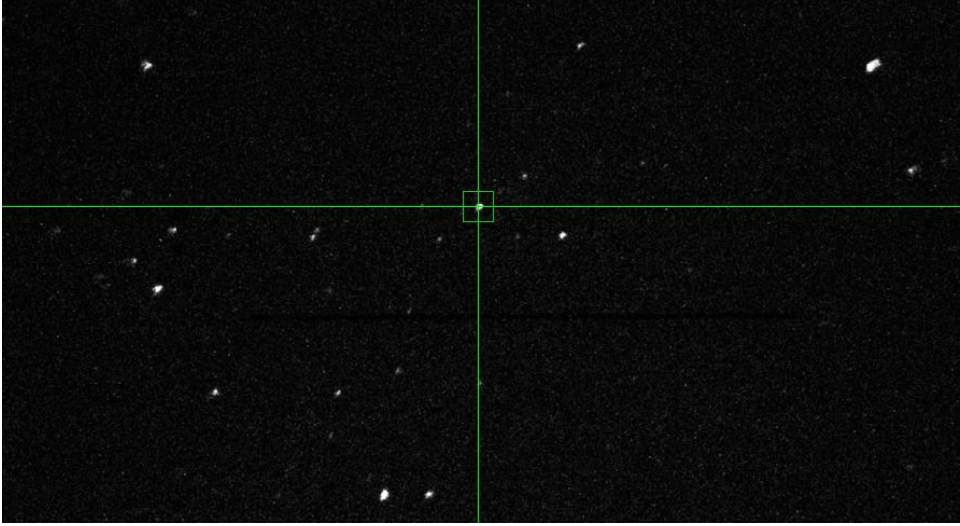
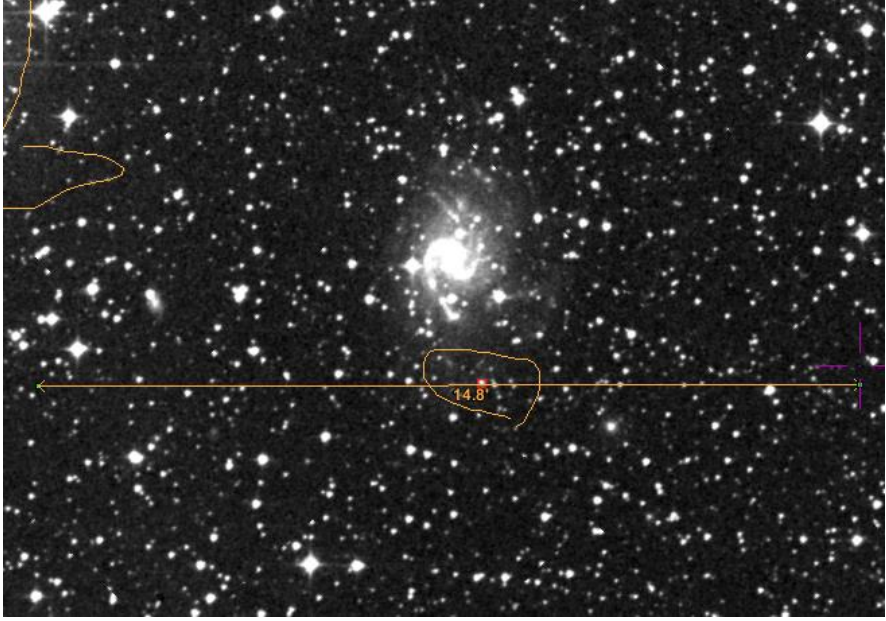
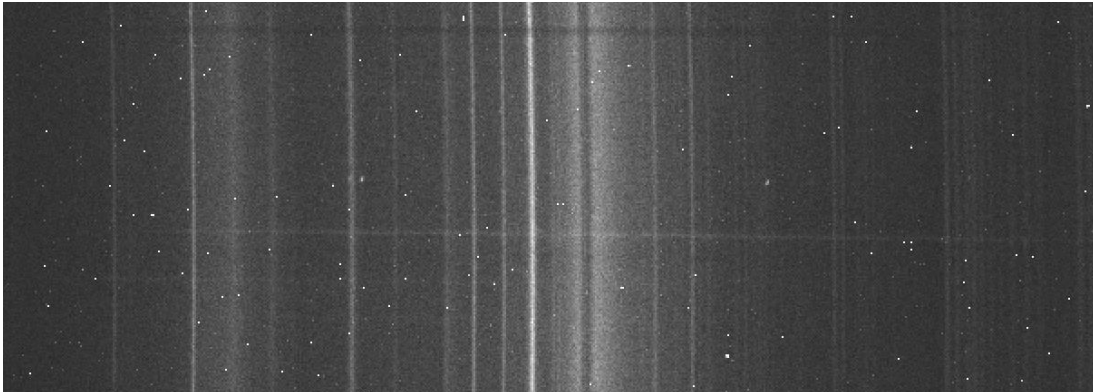
Observation Details

Date mm/dd/yyyy	02/22/2020
Location	Cornillon (France)
Observer Name	Lionel Mulato
Observation period	From 20h45 to 21h15 UT
Weather conditions (Air temperature, wind, atmospheric pressure, seeing)	T=8°C Wind : 0 km/h Cirrus

Equipment

Mount	NEQ6
Telescope	Newton Skywatcher 200 mm F/5
Spectrograph	Alpy 600 - 23 μ m slit
Science camera	ATIK 414 EX, temperature : -10°C
Guiding camera	ASI290 MM non cooled
Data acquisition Soft	ATIK Artemis
Data processing Soft	Isis V5.9.3

Acquisition parameters

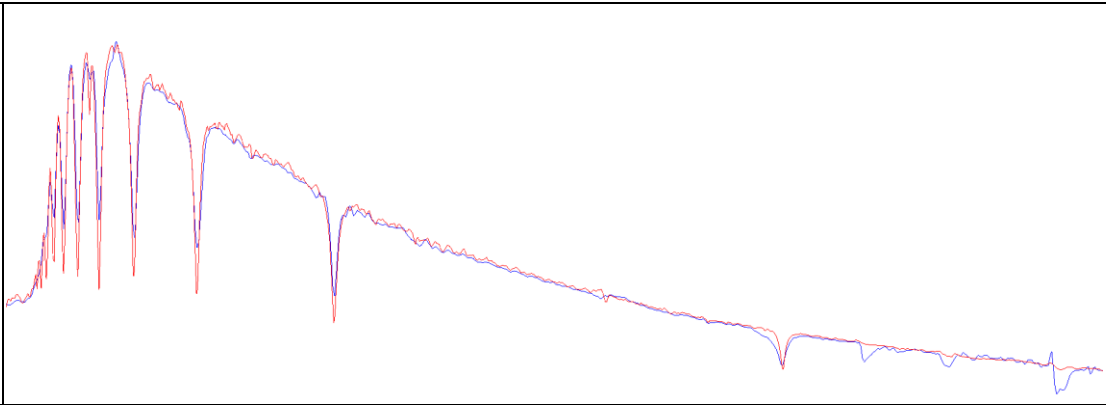
Binning	2x2	
Slit Position Autoguider image North up / East left	<div style="text-align: center;">  <p>Autoguider</p>  <p>DSS Red + slit position</p> </div>	
Autoguider exposure time	1 second exposure	
Raw acquisitions	8 x 10 minutes	
2D Raw Spectrum		
Reference Star	HD47575 Type : A2V	14x 25s acquired at 22h30 TU acquired 02/20/20 (couldn't take ref star spectrum on 02/20/20 because of cirrus arrival)
Dark	14 x 10 minutes, acquisition date : 02/18/20 – 02/20/20	
Offset	176 x de 0.001 sec, acquisition date : 02/18/20	

Flat 44 x de 0,8 sec, acquisition date : 02/18/20

Neon-Argon calib. 1 x 10 sec, acquisition date : 02/20/20

Data reduction

Instrumental Response

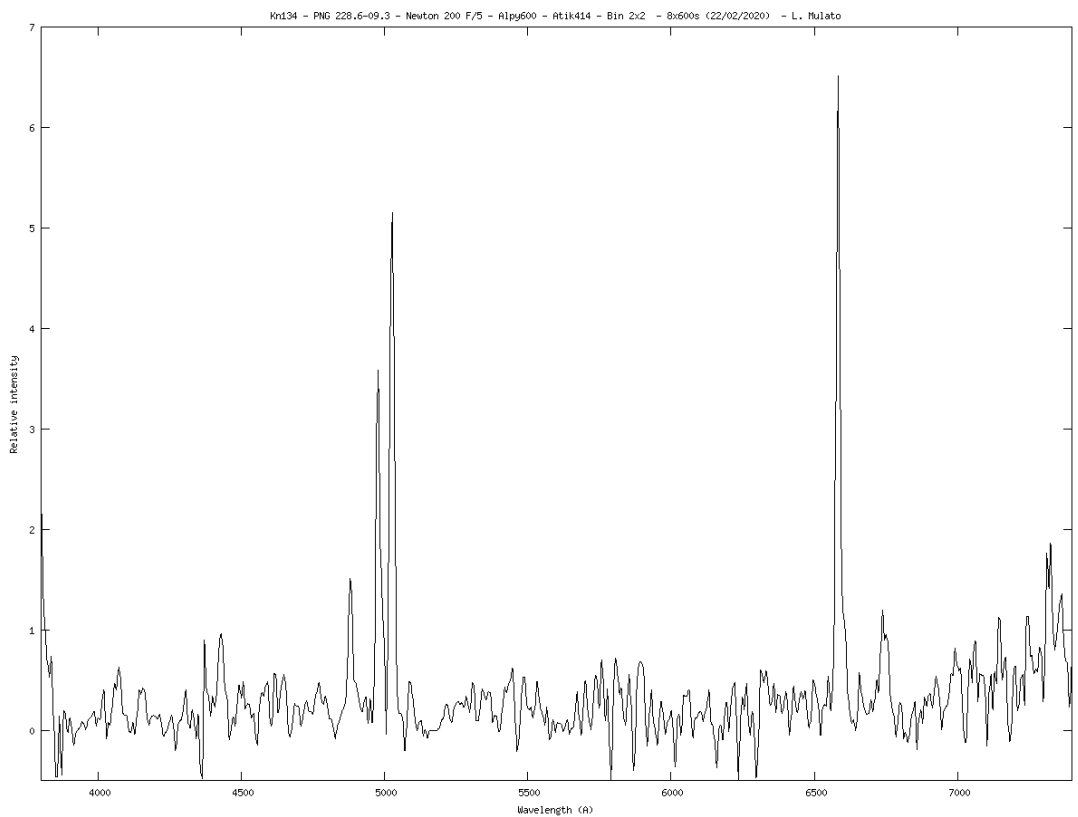


Processed Spectrum

2D



1D Spectrum



<p>Comments</p>	<p>Redshift detected (~17 A) on Ha, Hb emission lines, [O III] and [S II] doublet. Weak [N II] 6583 appears on the 2D spectrum.</p> <p>Slit has also been placed on Ritter 22, but no signal has been detected.</p> <p>Kn 134 may be correlated to ngc 2283.</p> <p>The radial velocity of ngc 2283 given by SIMBAD is ~840 km/s</p> <p>Spectral shift :</p> <table border="1" data-bbox="363 403 1385 616"> <thead> <tr> <th>Line</th> <th>Rest [A]</th> <th>Obs [A]</th> <th>v [km/s]</th> <th>dv* [km/s]</th> </tr> </thead> <tbody> <tr> <td>Hb</td> <td>4861</td> <td>4881</td> <td>1191</td> <td>±107</td> </tr> <tr> <td>[O III]</td> <td>4959</td> <td>4977</td> <td>1072</td> <td>±104</td> </tr> <tr> <td>[O III]</td> <td>5007</td> <td>5025</td> <td>1111</td> <td>±103</td> </tr> <tr> <td>Ha</td> <td>6563</td> <td>6584</td> <td>949</td> <td>±73</td> </tr> <tr> <td colspan="3" style="text-align: center;">Mean</td> <td>1081</td> <td>±97</td> </tr> </tbody> </table> <p>*dv derived from Ne-Ar lamp</p> <p>For the date the Earth's orbital velocity around the Sun is ~17 km/s away from the galaxy.</p> <p>The measured heliocentric velocity of Kn 134 is : 1064 ±97 km/s.</p> <p>The result is a bit high but seems consistent with ngc 2283 radial velocity.</p>	Line	Rest [A]	Obs [A]	v [km/s]	dv* [km/s]	Hb	4861	4881	1191	±107	[O III]	4959	4977	1072	±104	[O III]	5007	5025	1111	±103	Ha	6563	6584	949	±73	Mean			1081	±97
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Mean			1081	±97																											
<p>Conclusion</p>	<p>Kn134 is probably an active region of the galaxy ngc 2283.</p>																														

Log Isis

Version : ISIS V5.9.3

Date du traitement : 23/02/2020 11:47:06

Nom de l'objet traité : kn134

Nom complet du fichier de l'objet traité : _kn134_20200222_776_L.Mulato.fit

Chemin de sauvegarde : d:\astro\spectro\3-spectres\kn134\

Nom générique des spectres 2D bruts : d:\astro\spectro\3-spectres\kn134\kn134_

Nombre de spectres bruts : 8

Offset : d:\astro\spectro\3-spectres\kn134\offset-10

Dark : d:\astro\spectro\3-spectres\kn134\dark600s-10

Coefficient du dark : 1.0000

Flat : d:\astro\spectro\3-spectres\kn134\flat08s-10

Étalonnage : mode standard

Spectre lampe étalon : d:\astro\spectro\3-spectres\kn134\neon10s-10

Position Y de référence : 271

Taille pixel : 12.81

Registation verticale : non

Soustraction du fond de ciel : oui

Recentrage des spectres en longueur d'onde : non

Angle de slant : 194

Angle de tilt : 0.45

Retrait des rayons cosmiques : oui

Limite X1 : 208

Limite X2 : 486

Fichier cosmétique : d:\astro\spectro\3-spectres\kn134\cosme600s-10

Filtre gaussien : 0

Fichier de réponse spectrale : reponse_hd47575

Fichier de transmission atmosphérique :

Décalage spectral : 0

Correction vitesse radiale : 0

Facteur de binning en sortie : 1

Indicatif du mode d'étalonnage : 2

Longueur d'onde de référence : 5852.49

Position X de référence : 403

Instrument : N200 F/5 ALPY600 ATIK414EX

Résolution : 386

Site : Cornillon

Observateur : L.Mulato

Delta heure : 0

Ciel Y1 : 60

Ciel Y2 : 5

Ciel Y3 : 5

Ciel Y4 : 60

Largeur de la zone de binning : 9

Binning optimisé : oui

Coefficient de rejection des cosmiques pour le binning : 50

Zone de normalisation [λ_1 - λ_2] : [7300 - 7400]

Sommation standard des profils individuels

Interpolation : bilinéaire

A4 : 1.2038E-09

A3 : -3.089496E-06

A2 : 0.001688836

A1 : 6.8082325

A0 : 3012.58

Date de prise de vue : 22/02/2020 18:38:05

Durée de prise de vue : 5451.0

Durée de prise de vue décomposée : 8 x 600 s

Date de milieu de prise de vue : 22.808/02/2020

Jour Julien géocentrique du milieu de prise de vue : 2458902.3080

Pouvoir de résolution : 385.9

RMS de l'étalonnage spectral : 0.00000